PUBLIC HEARING FOR THE

DEWEY-BURDOCK UNDERGROUND

INJECTION CONTROL DRAFT PERMITS

AND PROPOSED ACQUIFER EXEMPTION 

May 8, 2017

1:00 p.m. to 8:00 p.m.

The Best Western Ramkota Hotel

2111 N. LaCrosse Street

Rapid City, SD 57701

REGIONAL JUDICIAL OFFICER SUTIN: Good afternoon, everyone. Thank you for coming. My name is Elyana Sutin, and I'm the Regional Judicial Officer for the Environmental Protection Agency in Denver, Colorado.

Thank you all for coming today. I will be chairing the hearing. And in addition to myself, there are other EPA staff here to assist in this hearing to ensure everyone who wants to speak has the opportunity to do so.

I'd like to introduce them at this time so that you know who they are before we get started. Douglas Minter is the manager of the Underground Injection Unit. There's Douglas by the door.

Valois Shea is also in the Underground Injection Unit in the Office of Water Protection.

Lynne Newton, who is out at the registration table, you all met her when you came in. She also works in the Underground Injection Unit.

Then we also have with us Lisa Vanderpool-McClain, who is standing in the back there. She is our Public Affairs Specialist in the Office of Communications.

And then we also have Sisay Ashenafi -- excuse me -- Ashenafi, who's our Community Involvement Specialist.

So if you have any questions, please reach out to one of those folks.

So we'll get started. On March 6, 2017, EPA issued two draft Underground Injection Control, or UIC, area permits to Powertech USA, Inc., for injection activities related to uranium recovery near Edgemont, South Dakota.

The draft permits include a UIC Class III area permit for injection wells for the in-situ recovery of uranium, and a UIC Class V area permit for deep injection wells for disposal of treated in-situ recovery processed waste fluids.

The EPA is also proposing an aquifer exemption approval in connection with the draft UIC Class III area permit.

We are here today to listen to your comments on these area permits and aquifer exemption. The public comment period is open until May 19th, 2017. In addition to this hearing today, there will be three more public hearings this week.

Tomorrow we will have another hearing here

in this building in this room. May 10th we'll have a hearing in Hot Springs, South Dakota, at the Mueller Center, and May 11th in Edgemont at the St. James Catholic church. For more information on times and location -- address location, please visit the registration table or EPA's Website.

In a moment, I'll turn it over to Ms. Shea, who will explain in more detail what was proposed in the notice. But before I turn it over to her, I'd like to explain a little bit about how today's hearing will work.

The first hour, from 1:00 to 2:00 today, was an opportunity for information gathering and question and answers. Starting with the hearing now, there will be no more question and answers as part of the official hearing.

We will have the same setup tomorrow. So from 1:00 to 2:00, if you have questions, you can come and speak with folks about your specific questions, and then the hearing will start again at 2:00 tomorrow.

We will take testimony from 2:00 to 5:00 today with a short break around 3:15 or so, and then again from 6:00 to 8:00 this evening.

I will call speakers to the microphone here in front of me if you have filled out a card at the registration table. When it is your turn to speak, please state your name before you begin your testimony.

In order to be fair to everyone, we will limit the testimony to five minutes each. We will signal to you when you have one minute left to speak, and then when five minutes has passed, I will ask you to complete your testimony.

Please try to be as succinct and on point as you can. If I find that we are straying from the topic at hand, I will interrupt and ask that you please return to the issue before us.

If we have time at the end and everyone has had the chance to speak and you have more to say than the five minutes you were given, then I will allow folks to get back up and finish their comments.

After you finish your testimony, members of the panel may ask clarifying questions. We are not here to explain the basis of the proposal. The notice does that. Nor can we exchange in a back-and-forth discussion of the proposal or respond to your comments during this hearing.

The purpose of the hearing is to receive your input. We will consider and then respond to all comments received during this hearing as well as all written comments in the final permits and aquifer exemption determination. We will not be answering any questions during the hearing.

We are recording the hearing today, so be assured that your comments will be considered. The court reporter sitting to my left will be preparing a transcript of today's proceeding that will be available for anyone who wants to see it.

The court reporter is independent of EPA, so if she is not looking at you while you are testifying, it is only because she is concentrating on your words to make sure she can get them into the transcript. Valois and I will be listening intently to your comments.

The transcript is part of the record and will be included in the docket for this matter. The docket is where EPA collects materials it has considered in its action, including public comments.

The docket is available on the internet for

your review, or you can view a hard copy at EPA's Denver office. The transcript of this hearing will also be available in the docket.

If you have written copies of your testimony, please give a copy to our staff at the registration table. This will be helpful as we prepare the transcript.

If you have other written comments or supporting documentation, you may leave those at the registration table, and we will make sure they are entered into the docket for this proposed action.

You may also submit written comments directly to the docket through May 19th. Instructions for submitting comments can be found at the registration table.

Once the final permits are issued and the aquifer exemption determination has been made, anyone who participated in the hearing by providing comments has the right to appeal the Agency's decision to the Environmental Appeals Board.

At this time, I will now ask Ms. Shea to provide more information on the permits.

MS. SHEA: Thank you, Judge Sutin.

I want to thank everyone for being here today. I know that you are probably giving up maybe time with your job or time with your family or another thing that you could be doing. So thank you so much to every one of you for coming and participating in our public hearing.

I would just like to provide a short presentation to provide context for the speakers that are going to be speaking here today. There was a lot of information on our website and not everyone had a chance to look at it. So I hope to have this brief groundwork laid, and then we can get on to our main topic at hand, which is listening to what you all have to say.

I just wanted to give you a little introduction on the Underground Injection Control program. It is authorized under the Safe Drinking Water Act. The mission is to protect underground sources of drinking water by regulating injection activities through injection wells.

Underground sources of drinking water are defined in our regulations as an aquifer or a portion of an aquifer which supplies a public water system, or which contains a sufficient

quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption, contains fewer than 10,000 milligrams per liter total dissolved solids.

The UIC program classifies injection wells under six well classes based on the type of injectate and the purpose for injection. Our UIC regulations allow us to exempt a portion of an underground source of drinking water under a certain criteria in our regulation, and that's a background for our aquifer exemption that I will talk more about in a minute.

So as Judge Sutin said, the EPA issued two draft area permits on March 6, 2017. One permit was for Class III injection wells for the purpose of uranium recovery in the Inyan Kara aquifers.

The second draft permit is a Class V area permit for deep injection wells that will be used to dispose of ISR waste fluids after they have been treated for the removal of radioactive -- well, it has to meet radioactive and hazardous waste standards in regulations.

The EPA is also proposing an aquifer exemption in conjunction with our Class III

permit that would allow injection into uranium-bearing portions of the Inyan Kara aquifers.

We also released some additional documents to support the administrative record, and these include an Environmental Justice Analysis; a Cumulative Effects Analysis of the effects of all the injection wells, since we are authorizing more than one; and then a draft document that explains the process we have conducted so far and the considerations under tribal consultation.

Our tribal consultation process is not over yet. It's ongoing. In fact, we consider it really has just started with the issuance of these draft permits.

The EPA is requesting public comment and review of all the documents up here, but of course the most important ones are the draft permits and the requirements there.

There are other agencies that are active at this site. The Nuclear Regulatory Commission has issued a materials license for the project. The South Dakota Department of Environment and Natural Resources has proposed issuance of a

large mine permit. They have not completed their public involvement process yet.

The Bureau of Land Management has a plan of operations. I don't think they have approved that yet. And then there's also an additional groundwater discharge permit under the DENR that has been proposed as an alternative disposal method for treated ISR waste fluids.

So this is just a map of the area. I'll point out the permit boundary, and it's along the South Dakota-Wyoming state line. The Fall River-Custer County line falls in the middle of the project area.

These -- there's a Dewey area and a Burdock area. There are four proposed well fields in the Dewey area -- some of them are kind of hidden. They are the green ones hidden in there, four total -- and then ten well fields in the Burdock area.

The green dashed line is the aquifer exemption boundary that exempts the portion inside the green dashed line so that injection might occur for the recovery of uranium. These are the location of the two proposed Class V deep wells.

So this is a blowup of the well field in the Dewey area. I just want to give you an idea of what the configuration of the injection wells and production wells would look like. On each corner is a proposed location for an injection well with a production well in the middle.

The EPA will regulate both production wells and injection wells as injection wells, so they're -- both types of wells are subject to the permit requirements because they often change roles during the process.

This line around the outside of the well field is called the perimeter monitoring well, which makes sure contamination does not move out of the intended injection area. And then there are underlying -- underlying and overlying monitoring wells above and below the injection zone.

I just want to say a few things about the quality of the Inyan Kara water. It is -- it is an underground source of drinking water, but it is high in sulfate and manganese and sometimes in some locations high in iron. People who drink the water usually use reverse osmosis to make it potable, to make it taste good.

And then in the areas where the uranium deposits occur, there's also high levels of gross alpha, radium and radon. So the natural radioactive decay of uranium results in radium, and then that quickly decays into a series of radon and daughter products that emit alpha radiation.

Now, alpha radiation does not penetrate the human skin. However, if this is -- if they are released into the air, like during a shower, it goes into your lungs and it can do damage there because you don't have a protective layer of your skin. So these areas that we're exempting do have high gross alpha, radium, and radon.

After this process is over and the well field groundwater restoration is complete -- and that's regulated by the Nuclear Regulatory Commission -- this area -- these areas, if wells are completed there, they can be treated using the same type of treatment, reverse osmosis, as before mining occurred.

This is a vertical cross-section of the Inyan Kara aquifers, and you see the Fall River formation, and then the Chilson formation, and this is where the uranium deposits occur. And

this is the vertical extent of the aquifer exemption area.

So this is a diagram of -- you can see the well field pattern here that you saw before. This actually explains the ISR process with a cross-section so you can see what's happening in the ground.

The lixiviant is injected, which is composed of Inyan Kara groundwater with added carbon dioxide and oxygen. It goes into the uranium deposit, mobilizes the uranium, and then is brought to the surface through production wells.

The uranium is removed in the central processing plant, and then the lixiviant is recycled back into the aquifer where the uranium deposit is located. So most of this water is recycled. Only a small percentage is lost from the Inyan Kara aquifer, and that is called the bleed.

So I just wanted to emphasize that if these permits were to be issued as final, that does not mean that Powertech can begin injection right away. They have to do extensive characterization of the geology and hydrology for each well field.

The crucial question is can uranium-bearing fluids be contained in the injection zone? One of the tests that they have to conduct is called a pump test. So this line represents the water level in an aquifer under natural conditions.

A pump test would mean that a pump is -- a pumping well is drawing water out of the intended injection zone. It lowers the water table, and this would show that there is adequate confinement above and below the injection zone. And that's the crucial question we want to know.

The other aspect is if they are able to withdraw the -- if they are able to depress the groundwater level, then that means they can also have horizontal confinement, and that's what we would be looking for before we would allow injection.

So this slide represents what we would want to see under the operating conditions. If this water table is depressed in the area where the injection and recovery is occurring, then we know that the inward flow of the groundwater is helping to contain horizontally the injected fluids.

Oh, I forgot I did those arrows that represent the inward direction of groundwater flow. So this slide just emphasizes, again, that if we were ever to issue a final permit that that doesn't mean injection could occur.

There's a whole list of testing and requirements that we would want to see before we would ever authorize injection. And I just brought out a few here.

We would want them to map all the plugged and abandoned exploration drill holes within the -- that perimeter monitoring well you saw in the other slide and identify the ones that had to be replugged.

We want to see copies of any new or historic drill logs that have been annotated to show the presence of a fault, fracture, or any joint for any drill holes located inside the perimeter monitoring well.

I do have to let you know that UIC regulations do allow ISR activities to occur in areas where there may be a breach in a confining zone. But in these situations, extra monitoring is required around the breaches.

And what this would look like, I used a --

an abandoned borehole here as the example. But the more likely scenario would be a fracture, but that just makes a better graphic to understand.

We would require a lot more monitoring wells right in this area to assure that this would -- this is the injection zone -- to assure that we would not be seeing any fluids move out of the injection zone. If that's detected, then it has to be remediated right away, and then we would revisit whether or not we would continue to allow injection in this area if they cannot contain the injection zone fluids where it belongs.

One of the most important aspects of our permit is the post-restoration monitoring. This is new to the industry. It's not required at this time. But as EPA's first permit, we believe that it was necessary in order to protect groundwater.

So we see our aquifer exemption boundary, which is located 120 feet away from the perimeter monitoring well. After restoration is completed in this well field area, as approved by the NRC, that's when our monitoring begins.

And what we want to see is that no ISR contaminants cross this aquifer exemption boundary, because this is a USDW, underground source of drinking water, and this is protected.

So we have established a rather complicated set of scenarios for this post-restoration monitoring to occur, but it is more protective than the permits we see today that are actually being used.

AUDIENCE MEMBER: Bullshit.

MS. SHEA: That's a good comment to make. Okay.

So -- oh, I went too fast. So it involves establishing baseline. That's a comment we heard during the NRC procedure, that a baseline needed to be a better process. So we've taken that into account. And then, as I said, we begin the monitoring as soon as the well field restoration is complete.

And if it turns out contaminants are crossing this aquifer exemption boundary, then more treatment has to be done and the cleanup has to occur and more monitoring wells have to be installed downgradient.

So now I'm going to talk about the Class V

deep injection wells for a moment. They are Class V because, according to UIC regulations, they are injecting above an underground source of drinking water, which is the Madison aquifer.

We are still using the Class I construction standards for the well because those are the most important -- or most stringent well construction requirements.

As with the Class III permit, Powertech would have to do a lot of testing to make sure that injection activity would not cause migration into underground sources of drinking water.

They also have to demonstrate that the Minnelusa aquifer is not an underground source of drinking water. So we anticipate that its total dissolved solids is less than 10,000 milligrams per liter, but we don't know for sure until that well is completed.

If it turns out that the Minnelusa aquifer is an underground source of drinking water, then the permit cannot move any further. We would -- the permit isn't usable at that point because we do not authorize at this time any injection into a USDW. And also the injectate must be treated

below radioactive waste and hazardous waste standards.

This just shows a cross-section of the geology in that area. This is the Precambrian basement. This is the Minnelusa -- proposed Minnelusa injection zone. This is the confining zone that separates the injection zone within the Minnelusa from the Madison aquifer. This is the Inyan Kara group aquifers up here where you see uranium deposits have been shown here.

So I wanted to talk a little bit about the Minnelusa. You probably heard about the breccia pipes, and I wanted to explain a little bit how that happens. There's a -- the Minnelusa aquifer contains a lot of anhydrite, which is a soluble sulfate mineral.

And near the Minnelusa outcrop, the Madison aquifer is very high pressure and will push through and actually dissolve this anhydrite. So in areas where the Minnelusa aquifer is being used for drinking water, this anhydrite has been dissolved away, and you're actually getting good, low-sulfate water out of the Minnelusa.

And this is -- this represents where these breccia pipes are forming. And then

downgradient, the anhydrite is still in place, and that's one of the things we're looking for in our permit characterization.

This just shows a map view. The dissolution zone is occurring six miles away from the Dewey-Burdock site. Here's the Minnelusa outcrop, and this is where that anhydrite that you saw in the last slide is actually dissolving away.

And here it's intact, so that means that the water is high in sulfate, high in total dissolved solids, and most likely not an underground source of drinking water.

Another way to look at this, the confining zones and whether the anhydrite is present. This map shows the dissolution zone that you saw in the last slide. There have been a number of oil and gas test wells that have been drilled throughout this area, and there are not a lot of logs to look at to make sure that the -- that anhydrite is in place and you have a good confining zone.

So this extra investigation of the area is more than we usually have in our deep well permits because we want to assure that there's a

good confining zone that is continuous over the area.

And I think I already mentioned most of this. We looked at the drill -- we'll be looking at the drill logs from the deep Class V wells themselves. We looked at the plugged oil and gas wells shown in the previous slide. We're also looking at the groundwater levels of the Minnelusa and the Madison.

As I mentioned, the Madison is a very high-pressure aquifer, and its water level is actually above the ground surface over a lot of the area. The Minnelusa is not a high-pressured aquifer, so one of the things we'll be looking at is the groundwater level in the Madison and the groundwater level in the Minnelusa. And if they are different, we know there's a good confining zone in place.

We also look at the sulfur concentration -- oh, wrong button. Sorry.

The sulfate concentration, we expect it to be high because the anhydrite is there. If it's very low, then we know the anhydrite is not there.

And then also looking at the Madison and

Minnelusa water chemistry further near the outcrop where the Minnelusa is being used for drinking water, its water chemistry is very similar to that of the Madison.

Down where the Dewey-Burdock site is, we expect to see it to be very different, and that will also confirm the confining zone.

I just wanted to mention the treatment and storage ponds. Radium is the only radioactive waste expected to occur in the ISR waste fluids. It's removed by mixing it with barium chloride, and then it's placed in these settling ponds where the radium is precipitated out.

Then it moves into the outlet ponds, and this is the treated water that would go to the Class V injection wells.

And I just want to emphasize again how important these public hearings are to the EPA and, once again, express my appreciation for you being here.

The reason we issue the draft permits in the first place is that our regulations require us to act on a permit application and issue a draft permit to begin the public process -- public review process to get input.

Your comments do matter. We are going to read every one of them. We are recording them in detail as you speak them. And they have the potential to change the permit conditions that you see today.

Our regulations require a 30-day public comment period. Ours has been quite a bit longer because we realize we have given you a lot of information to read over. And our regulations say that we have a public hearing if we hear there's interest. But we knew there was interest, and we wanted to provide a number of locations for you to attend as conveniently as possible to where you live. So that's why we're holding four -- five days of public hearings.

That's it. Thank you very much for your attention.

REGIONAL JUDICIAL OFFICER SUTIN: Okay. I'll start calling speakers.

The first speaker is Floyd Looks For Buffalo, if you can come to the podium.

I think that the microphone can be taken out. Yeah.

FLOYD LOOKS FOR BUFFALO: Hello. Excuse me. Too loud.

I come here on behalf of the Great Sioux Nation of the 1851 and '68 treaty. I am a treaty chief of the Oglalas under Red Cloud. I'm a descendant.

And what I'm here for is that during Obama's administration, under the United States Constitution Article VI is a supreme law of this country after 1492.

We gave a trespass authority on -- under 1851 to the European-American immigrants to trespass to West Coast. We did not give them the water rights, our mineral rights. And under this declaration, we reminded Obama. So as of August 23rd, 2013, Obama in executive order acknowledged that.

And the declaration we have here is that the members of the Cheyenne River, Crow Creek, Fort Peck, Lower Brule, Oglala Pine Ridge, Rosebud, Standing Rock, Yankton, and Santee. This Treaty Council represents the Great Sioux Nation of the Black Hills, and we own the property of the 1868 territory, which is the Black Hills.

So therefore, the declaration here I have is the Declaration to Invoke Inherent Rights and Authority Under the 1851 and '68 Fort Laramie

Treaties over mineral exploration and extraction; over energy and fuel pipelines of a kind; the unauthorized ceding of land in the name of the parks; and other matters. To all United States: State, federal, and other officials listed on the attached service list and the public at large.

Then invoke inherent rights and authority over mineral exploration and extraction; over energy and fuel pipelines of any kind; and the unauthorized ceding of land in the name of parks under the '51 and '68 Fort Laramie Treaties.

And if you look at the United States Article VI, it will clearly tell you that North America is a ceded land under treaty. And an order -- this is direct and inherent rghts of Native people.

Underneath that is an agreement between the United States government and the Native people. They call that Bible and a pipe transaction, sacred pipe. That is an agreement which is called Articl VI, treaty to live here, not to extract mineral. We own the mineral.

Furthermore, I would like to remind you that I will side with the Clean Water Act here, and

we're not going to go through the federal. We are going to go through the United Nations Treaty.

And while the United Nations Constitution automatically suspends the state action and federal. Because under the treaty act, the federal is the second one. And the last is the state. That's the order of -- under the United States Constitution.

So you need to know your U.S. Constitution and Treaty Council before you start trying to -- what I foresee here is that privatization of all these uranium areas we have under Trump.

And what I see coming here is condemnation of all you old home folks in Black Hills, to extract the minerals, gas and oil and zeolite and uranium or inositol.

And let's not bother the aquifer with a lot of fairy tales because that's our livelihood. That's what's serious. Don't mix oil and water and drink it together. I'll go without water. No uranium. I'm going to put a stop to it under the treaty. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Looks For Buffalo.

Next, if we can have Marvin Kammerer.

MARVIN KAMMERER: I hope my time didn't start back there because I've gone past the age of 80 years in this great land, this beautiful land, this drought area land that you people are trying to spoil.

You people don't look old enough to begin to understand the relationship of water in our heritage. The heritage of the Wasicu came later than the Native American. I am a Wasicu. I'm a cowboy, used to be.

But don't ever sell our water or the use of our water to a foreign corporation or a foreign entity. That's our water. And by God, we'll fight for it. We send people over to Iraq. We send people around the world to fight for corporate interests. To hell with them. Bring them back right here. We will fight for what is ours.

The amount of water that is maybe being permitted here, it's a tremendous amount of water. 9,000 gallons a minute for 20 years, 24 hours a day if they want. At 15 gallons a cow, will water 860,000 head a day.

And we, who live in a drought-stricken area,

our dams are dry or almost dry. Several years ago at the last drought, we had to dig a hole 2,260 feet deep into the Inyan Kara, the one they want to pull out of now.

And it waters our stock in wintertime. And when the dams were dry and empty, we had to put in miles of waterline. But the Inyan Kara is a blessed gift.

And every other one of these bodies of water under there, we don't know what's going on under there. It's a suggestion. It's a gimmick. The upheaval of the hills is still going on, and when you stick poisoned water back -- and don't tell me it can be cleaned up. It's never been cleaned up. And I don't want it.

That water you're drinking right there right now, when they get through cleaning it up, can I bring you up a gallon of it and have you sit there and drink it while we're giving testimony. You know better.

It's our water. It's God's gift. We have to be careful with it. Look how we're poisoning water all around the world, simply for the method -- mode of profit to somebody. It's our water. It doesn't belong to the damn Japanese

or Chinese. It doesn't belong to a corporate interest anywhere. It belongs to us.

My Native American brothers and sisters and us ranchers, we're sitting here trying to survive. All of you eat steak once in a while, I'm sure. We produce it. We produce good ranch kids who can go to your cities and their leaders, they'll pick things up and get things done, and they do the same at home.

If you put a bucket of water and a bucket of gold out in the middle of a pasture, and in a cage we lock somebody up for about four days, five or six, I know where he's going when he gets out. Because he hasn't been fed or watered or anything. Gold don't amount to much when you're thirsty. And I've drank some sour water.

That Inyan Kara is not all that they try to -- and you people are trying to say it is. And off to the -- near that area, when they force this damn injection back in and they're wanting extra wells? I question seriously why.

In that area there's a munitions dump. There's mustard gas and others still laying under there. They don't know how much. We brought it in here at -- in World War II and

after. When we force this pressurized water in there, we move it, either it goes into another aquifer, and it migrates. And if it gets into this area, it saturates where all these poisons are laying. You'll have the damndest boom you ever saw.

Let's get smart for once. Let's not chase after the corporate entities. Let's look after ourselves. Let China clean up its own damn environment.

REGIONAL JUDICIAL OFFICER SUTIN: Mr. Kammerer, your time is up.

MARVIN KAMMERER: Don't dirty ours.

REGIONAL JUDICIAL OFFICER SUTIN: I need to ask you to wrap up, please.

MARVIN KAMMERER: I'm going to give you a written sheet, and I don't write well and I don't type. I'm an old man, and I'm not going to learn. But I'll give you a handwritten sheet on the -- by the 19th, and I hope you'll read it because it comes from me in here.

Granddad walked in here in 1880 with a freight train, when the -- when the homestead had opened up, he filed. And we're still here. And by God, we're not leaving, and you're not

going to poison our water. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Kammerer.

Next, Carol Hayse.

CAROL HAYSE: Hi. My name is Carol Hayse.

REGIONAL JUDICIAL OFFICER SUTIN: Ms. Hayse?

CAROL HAYSE: Yeah.

REGIONAL JUDICIAL OFFICER SUTIN: I'm sorry. But the court reporter needs to be able to hear your words. So if you can speak to her, please.

CAROL HAYSE: Okay. I can give it to her in writing, also.

REGIONAL JUDICIAL OFFICER SUTIN: Okay. Great. That's great.

CAROL HAYSE: I'm Carol Hayse, and I live near Nemo, South Dakota. My theme today will be lies, cowardice, laziness, hypocrisy, cynicism, Native rights, and Azarga's and the EPA's role in environmental destruction or protection.

First, let us say that there are good people in the EPA who want to do good things and have done a few good things. Perhaps some are in this room.

But my message to you, the EPA, today is, Don't be lazy, don't be a coward, stand up to

Trump's war on the environment. Be like the employees at the Badlands Park Service who posted the truth about climate change on the website. When you rule on this draft permit, speak truth to power.

Today, those of you from the EPA will be hearing or reading some good science, and some bad science. The good science will be from community members opposed to pollution of our precious Black Hills aquifers. The bad science -- call it alternative science -- will be from Powertech.

EPA, believe the community members. Follow up on the sources we provide you and decide to stand for the truth, that the in-situ leaching -- not recovery, in-situ leaching will allow poisons into Black Hills aquifers. Learn these truths, that the Black Hills aquifers are permeable, despite the testimony of the woman today.

They leak into each other, so there is no way to sequester the toxic byproducts of in-situ leaching. And please, Friends, never call it in-situ recovery; it is in-situ leaching. And second, learn that ISL may use horrific

chemicals, like sulfuric acid, to do its dirty work.

Let's talk about hypocrisy and cynicism. It is breathtakingly cynical for Azarga and other mining forces to stand before us and say that they will clean up after their mining activities.

They cannot restore the leached water into its prior condition, and they know it. Consider this quote from the U.S. Geological Survey: "To date, no remediation of an ISL operation in the U.S. has successfully returned the aquifer to baseline conditions."

And Powertech, they are crooks to boot. Their stock is worth pennies, and Platinum Partners, which owns 30 percent of Azarga stock, is under indictment -- is under indictment that basically describes Platinum Partners as a Ponzi scheme, according to the *Rapid City Journal* and other sources.

So even if Powertech intended to use the most advanced monitoring and cleanup methods on the Dewey-Burdock site, they wouldn't be able to afford it. The people of Custer and Fall River Counties will be left with toxic water and the

bill to pay for it, pay for it with the health of their children, their stock, and their livelihoods.

Now let's talk about the opposite of cowardice, courage. Let's talk about what real environmental protection looks like. I think it looks like the Native folks who stood tall at Standing Rock, defending the earth and the water against scum like the Dakota Access Pipeline and those who stood against the KXL Pipeline as well.

We here in this room need to follow the leadership of those proud Native folks and their allies to defeat Dewey-Burdock. We community members here in this room are all allies against environmental destruction.

We invite you, the employees of the EPA, to stand for Mother Earth, to stand for clean water, to stand for the principles that probably caused you to seek employment there in the first place.

Stand against these mining permits.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Hayse.

CAROL HAYSE: Protect our water. Mni

Wiconi. Protect our water. Mni Wiconi.

(Group chanting.)

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

I'd like to get back to testimony so that we have time for everyone to speak, but thank you.

Next if we can have Michael Herrera.

MICHAEL HERRERA: I just wrote something up real quick. 

I'm standing here against Powertech/Azarga today. I volunteered for Dakota Rural Action a few years back on a petition against the license for their access to the aquifer. I have lived here since the age of ten. I live south of Hermosa right now.

Hermosa's groundwater is contaminated with radium. It's a small amount. The water is still safe to drink, just putting that out there. Further south in Edgemont, the groundwater is contaminated from uranium tailings from the mining that started back in the '50s.

Yeah. So now, Powertech/Azarga wants to come in and open up their own project. Powertech has no experience and hasn't drilled or mined anything, according to the sources I've

read on the internet. They own over $10 million in uranium reserves. To give Powertech access to one of the main water supplies for the Black Hills, the Madison aquifer, sounds dangerous and ridiculous.

I don't know how this company got here and elevated up with so much privilege. I know they have connections with the state government somehow. I don't know all the facts. They hired Mark Hollenbeck, former mayor of Edgemont. Hollenbeck, he said he believes it's ridiculous that they have to wait so long to be able to get to work on this.

And I just want to say: Have you considered the consequences of what could happen? What do you expect? Do you think you can just come in here and open up shop? And -- yeah. What it really boils down to is it's all about the money.

I like it here in South Dakota for a couple reasons, one being that we're far from most major cities, so we don't have much traffic and pollution. Two, I can enjoy the peace and quietness, especially at night. I'm from Southern California. That isn't something that

we get to enjoy there.

There is a survival community that just opened up outside in the Edgemont area. It's called Vivos xPoint. They have a big settlement where the military used to store bombs. They have turned the bomb bunkers into houses and created some other features like recreational areas and a shooting range.

They dug wells to provide them with their water. I just -- I think it's interesting that there's a culture growing popular among people here in the states surrounding self-sufficiency and living off the grid. Society is getting bigger. Eventually we're going to be struggling with resources.

Already we get most of our things from outside the U.S. If things were to fall apart tomorrow, how would people react? With so many people living around the poverty line, like in Pine Ridge, things would be real bad without anyplace to get food and water. So we would have to do these things ourselves.

Is it worth it to have Powertech/Azarga come in and start mining? They want to convince us that the operation is going to be safe and

nothing bad is going to happen. Well, shit happens. Nothing is perfect. Some accident will definitely occur.

To them it's nothing. And, yeah, they might care, but it's our future generations that is what's really important. You can look at the facts on Crow Butte, Nebraska, Cameco -- I think that's how you say it -- the company mining, was underreporting a lot of incidents.

Who's to say Powertech will do the same? Can we trust them to watch over their own actions as rookies in the mining field? Let's not do this. Let's keep this place clean and free from the industrial footprint.

We're not exactly ready to ditch modern sources of energy and move on, but people are innovating and finding new ways to do things.

Uranium is used for energy and weapons. Nuclear energy we already know is risky. Look at Chernobyl in Russia, and see how long that place has been closed off. These are long-term problems, and when they happen, it's over. Forget about it. This company isn't going to do us any good.

Just think, when they tell us everything is

going to be all right or criticize us, saying we're misleading the facts, I want you to remember it's all about the money. And that money isn't going in our -- that money is going in their pockets, not ours.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Herrera.

Rick Bell. 

RICK BELL: Good afternoon. My name is Rick Bell. I'm a resident of Rapid City. I'm a professional engineer in the state of South Dakota. I'm chairperson of the local Black Hills Chapter of Dakota Rural Action, and president of a local firm, Sustainable Environmental Energy Engineering, LLC.

Now, before moving here and starting my own company, I worked for more than 40 years in the environmental cleanup field for a variety of industrial companies and as a consultant. My remediation experience is global. It's led me around the world, working on projects on five continents.

I worked for the -- here in the U.S. on private cleanups as well as state and federal CERCLA and RCRA sites. I've installed thousands

of groundwater monitoring wells, injection and recovery wells, and I've -- I understand that the most critical component of the work that I've done has been in groundwater monitoring in all of its facets, including the analytical data, data management, risk assessments, et cetera.

In addition, while employed by a chemical company which had multiple production facilities in the Gulf Coast, I became a deep well injection expert, and I've installed or operated many wells, Class I injection wells in Texas, Louisiana, and Florida.

I'm speaking to you today in opposition to EPA's approval of Powertech's Class III injection well permit. It's my fervent hope that this permit will be denied or at least materially changed, modified substantially.

With all my industrial and consulting background, perhaps you're surprised that I'm here on the side of permit denial. But many, many times I've sat across the table from EPA representatives or your contractors arguing -- or should I say, discussing whether or not we had adequate contamination -- excuse me, let me

go back here -- the pros and cons of a particular set of actions regarding the proposed cleanup actions that my company or client had proposed.

And more often than not, it's come down to many questions about whether we had sufficient data to demonstrate that groundwater contamination plume had been adequately characterized, and whether the risk assessment assumptions and conclusions were justified.

We were required, often by various regulators, to install more and more wells, to collect more and more data, and understand better the fate and transport of contaminants in the subsurface.

And one thing that I've learned over my career is that it's impossible to know with absolute certainly where and how groundwater is actually flowing.

Now, it seems kind of ironic that I'm on the other side of the table. EPA is on the other side of the table from us in this situation. I find that your recommending -- I want to -- now I find myself on the side of recommending that you deny this final Class III injection well

permit.

And you, the EPA, whose mission it is to protect human health and the environment, seem to be on the other side, on the -- the side of a foreign industrial company who's likely to contaminate our groundwater.

I just don't believe that this proposed course of action has adequately demonstrated that it will be able to protect human health and the environment. Let me explain why.

We've already heard about the ISL injection of leachate into thousands of wells in the Inyan Kara aquifer, where the uranium exists naturally, and it would be artificially dissolved with this leachate, along with many other heavy metals.

The leachate solution is then theoretically captured and pumped to the surface where it's processed. However, once uranium and other heavy metals are mobilized in this fashion, it's absolutely impossible to guarantee capture.

I've seen the cartoons that have been put onto the board here about the typical five-spot well field pattern. This is a dream that someone had sitting behind their desk or perhaps

even in a laboratory under ideal conditions. But I can tell you, it doesn't work in the real world where heterogeneous conditions exist.

In geology such as this, I put in a well that's been able to produce less than .1 gallon per minute, and 10 feet away, it's produced 30 or 40 gallons per minute. So we don't understand what's going on in the subsurface, and we need to do a lot better job.

These interconnected fractures and fissures make it impossible to predict with any certainty about how these fluids are actually flowing in the subsurface. And once the recovery wells are turned off, then this mobilized mass of uranium and heavy metals will continue to flow unabated in the subsurface.

So it's my opinion that it's pretty well guaranteed that if this final permit is granted, a huge groundwater contamination problem would be created. And despite permit conditions that requires Azarga to restore to preoperation conditions, we've already heard today it's not possible. No operation has ever been able to do that.

So in conclusion, I would like to ask the

EPA that if you do grant this Class III injection well permit, that you insist upon two things. Before approving them, much more work should be done with pilot wells in this location and transparency with regard to distributing the results of those tests.

Secondly, I would ask that Powertech/Azarga must place a large sum of money -- I'm thinking millions of dollars -- in reserve or an escrow account for the eventual cleanup of this site that is likely to occur.

So I would ask you guys to really consider some more thought go into this whole process. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you. Thank you, Mr. Bell.

Don Kelley. 

DON KELLEY: Good afternoon. My name is Don Kelley. I'm a retired pathologist living in the Black Hills.

I'd simply like to report to you that in 2014, after discussion of the ISL uranium mining technique and the potential risks to South Dakota aquifers, the South Dakota Medical Association adopted a resolution opposing

uranium mining in the state.

It was felt that the risks outweighed any potential benefits to the residents in the state. In this action, South Dakota followed the example of the Colorado Medical Society, which also went on record to oppose uranium mining.

I think physicians in the region are concerned about the public health consequences of any prolonged increase over background radiation exposure, even if small, experienced by humans or food animals, and are concerned as well about the chemical toxicity of uranium and other heavy metals freed during the ISL procedure.

Proven and potential cross-communication and cross-contamination among aquifers pose a significant risk to health, which the proponents of ISL uranium mining have no way of providing absolute protection against.

That's basically my comments. I do have a copy of the resolution adopted by the medical society. I would be happy to leave that with you. It's got all the references about health risks.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Kelley.

Next if we can have Julie Lantis. 

JULIE LANTIS: Good afternoon. I'm speaking in opposition to granting the permits. My family has been involved in ranching interests in western South Dakota for many years. And we've been through more than one drought cycle, as Mr. Kammerer referred to.

Every drop of water, every acre of grazing land is so important to us. We get our drinking water from the Madison formation. So these matters affect several generations. We are hoping that our grandchildren will be able to continue to ranch. But there, again, they need water and they need grazing land.

Mr. Hollenbeck says that when the water is cleaned up, it's basically like saltwater that they will put back into the aquifers. Why would we want to put anything back into our aquifers that isn't pure water?

The amount of water they are taking out, 9,000 gallons per minute, is a huge, huge amount of water. And if you've ever stood day after day looking at the sky waiting for it to rain,

that amount of water is very scary to us.

So that's the reason I am opposed to granting these permits. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Lantis.

Kim Kelley.

KIM KELLEY: My name is Kim Kelley. I've lived in western South Dakota for 55 years, and I appreciate the opportunity to express my concerns about Azarga/Powertech's plan to mine uranium at the Dewey-Burdock site.

I don't believe that ISL uranium mining is a beneficial use of our groundwater or that disposal of wastewater via land application or in Class V disposal wells is in the public interest.

Three areas of the proposed project that most concern me are, first, the fate of contaminated mine waste materials; secondly, unrealistic aquifer restoration plans following ISL uranium mining; and third, the choice of uranium as an energy source.

My first concern is the toxic waste produced by ISL uranium mining. According to Azarga/Powertech, the proposed radium settling

ponds lie at the base of the Beaver Creek basin and the Pass Creek sub-basin, watersheds that drain approximately 1,400 square miles.

Three miles downstream from the proposed ponds, these basins empty into the Cheyenne River. Radium is a dangerous waste material, and little information is provided about how pond leaks, spills, and potential flooding will be dealt with.

The proposed well fields are located approximately 2 miles southeast of a large fault named the Dewey Fault. So far this fault is known to extend approximately 16 miles east and 4 miles west of the proposed ISL mine site.

The consequences of an excursion of contaminated groundwater along a fault impacted my community when two containers of ethylene dibromide, a pesticide used to control the mountain pine beetle, was reportedly disposed of near the U.S. Forest Service Nemo Work Center in the mid 1970s.

Plumes of groundwater contaminated with this probable human carcinogen continued to follow a fault that communicates with Box Elder Creek, upstream from a well-documented karst formation

in the Madison limestone, and down into the Madison aquifer below Rapid City.

Costs for water transport and water treatment were considered to be too high when the EDB was discovered in regional domestic wells in 1997, and so for the past 19 years, the community has depended upon one remote community well and two domestic wells for its entire water supply.

If such an excursion were to enter the Dewey Fault, the scale of the problem could be staggering. I believe that Azarga/Powertech is overconfident in stating they will simply pump back excursions of lixiviant that occur.

My second concern has to do with the aquifer restoration plan. According to Azarga/Powertech, the company proposes to restore the contaminated aquifers by treating water pumped from production wells using reverse osmosis, membranes under high pressure, thus removing 90 percent of the dissolved constituents. Restored water will then be returned to injection wells, and the RO reject, the brine, will be disposed of in the Class V wells.

The company has concluded that minimal benefit, if any, is derived from the groundwater sweep prior to deep well injection and suggests eliminating groundwater sweep as an unnecessary, ineffective, and consumptive step in the restoration process.

According to the EPA, "High pressure reverse osmosis can only be employed after groundwater sweeping, because high concentrations of contaminates during the initial stages of the restoration process tend to disrupt and rupture the RO membranes."

My third concern is the assumption that ISL uranium mining will contribute to clean energy. In 2002, the Bush/Cheney administration's Nuclear Power 2010 Program provided large subsidies for a handful of Generation III+ demonstration plants. The expectation that these nuclear power plants would be built and come online by 2010 has not been met.

Azarga/Powertech has also stated that the company would like to sell uranium oxide on the world market, especially to the BRIC nations, Brazil, Russia, India, and China. Nearly all of the reactors that have been built or under

construction in these countries are light-water reactors.

The hope that breeder reactors would replace light-water reactors and that more economic means of reprocessing spent fuel would be developed has not been realized.

At present, it is generally found to be cheaper to mine new uranium, which is then used in a once-through process that creates spent fuel, the radioactive waste that is considered to be the Achilles heel of nuclear energy.

The nuclear industry uses uranium in the least efficient way and is fraught with dangerous waste and high costs associated with construction, operation, repair, decommissioning, and cleanup after accidents.

Various agencies have tried to estimate --

REGIONAL JUDICIAL OFFICER SUTIN: Ms. Kelley, your time is up, so I need you to wrap up.

KIM KELLEY: One minute?

REGIONAL JUDICIAL OFFICER SUTIN: Quickly.

KIM KELLEY: The estimated length for primary sources of uranium, assuming a once-through cycle, is said to be 42 years.

Thus, in order to provide nuclear power for a period ending during the lifetimes of many alive today, we leave permanent potential increased contamination of soils, river systems, and aquifers.

Throughout our human evolution, humans have discovered, developed, and abandoned myriad energy sources, whale oil among them, notoriously. If we run out of our -- if we run out of or choose to stop using oil, coal, natural gas, or uranium, we can make use of many other energy sources. There are no alternatives to water.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Kelley.

Next, Mark Winegar. Sorry if I said that wrong.

MARK WINEGAR: Hi. I'm Dr. Mark Winegar. I'm from Vermillion, South Dakota, and I'm the political chair of the South Dakota Sierra Club. And I am very impressed with the level of expertise of the people who have testified this afternoon. I don't share their level of expertise, but perhaps I share their level of passion.

You see, I'm a computer scientist. I'm not a rancher. I'm not a member of the Oceti Sakowin. But I do value life. And as I understand it, your mission is to protect the human health and the environment.

We are here today to discuss allowing a foreign-owned corporation to mine for uranium and to drill a total of eight boreholes. Now, normally you only need one. Part of what I heard this morning makes me wonder, if there is more than eight required, what this corporation wants to do.

There are already over 15,000 abandoned uranium mines within 15 Western states; 75 percent of these are in federal and tribal land. Ten million people live within 50 miles of an abandoned uranium -- I've got to move this, sorry -- of an abandoned uranium mine.

No existing federal law requires the cleanup of these hazardous waste sites. Most of these abandoned uranium mines were established under the General Mining law of 1872 and remain dangerously radioactive for hundreds of thousands of years. We will all be long gone.

The public health threat they pose grows

greater the longer they are left abandoned. This threat to our health is invisible. It seeps into our water. It contaminates the livestock. It is carried in the wind for hundreds of miles. And there is no dose of radiation that is harmless.

Listen to these good people here today and work to clean up every abandoned uranium mine in the nation before considering a new one. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Winegar.

MARK WINEGAR: I'm sorry?

REGIONAL JUDICIAL OFFICER SUTIN: I said thank you.

MARK WINEGAR: Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Next, if we can have Chloe Olson.

CHLOE OLSON: Hi. My name is Chloe Olson, and I am an environmental engineering student at the School of Mines. First, I'd like to say I am a proponent of nuclear energy because I think it's a clean alternative to fossil fuels, but I do not support the mining of uranium in the Black Hills.

My main issue is with Powertech. There's a lot of things I could say about this company, but I thought that I would focus on their financial and economic analysis because I know a lot of people are interested in the money aspect of uranium drilling.

In 2015, they estimated that they could sell uranium for $65 a pound. With the price of $6.53 for a federal tax and $18.86 for the mining costs, they projected that they would mine 9.7 million pounds and make over -- make a profit of over $300 million.

In 2015, though, the long-term price for uranium was $46.29, and the stock market price was $36.55. I'm not really sure where the $65 came from.

I also have the last five years of uranium prices. As you can see, they're all declining. Nothing has gone up in the last five years. Today's prices for the long term is $33.12. And the long-term pricing, for those who don't know, is just a judgment for uranium companies, just, they think that that might be a price in the month, but it's not the actual stock market price.

So the actual stock market price right now is $23.50 a pound. If they use this -- if they could sell at this price and take out the federal tax and the mining cost, it would be a negative $18 million to mine for uranium, which doesn't really make any sense.

I'm really concerned about this overestimation. I think that that's the company trying to win us over because they are foreign.

I also am concerned that they don't care about our livelihood because they are not from South Dakota or even the United States.

Another thing that really bothers me is their current stock price is 32 cents per share. That's a penny stock. This company has no financial backing. And if they did spill into our aquifer that provides water for 59,000 people in South Dakota, they would not have the amount of money to try and clean it up.

So I hope that you take this into consideration. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Olson.

Waniya Locke.

WANIYA LOCKE: (Speaking in ingidenous 

language.)

My name is Waniya Locke. I'm from Standing Rock. First and foremost, I should be able to address you in my own language since our language was the first language ever spoken here. So I request that the EPA, the next time you come into our homelands, to bring a translator and a transcriber for the Lakota language.

We have 2.5 drinkable water for the whole world. We are currently fighting pipelines, copper mines, uranium mines. Out of that 2.5 drinkable water for the whole world, 1.7 is groundwater. Our water aquifers are precious because there's no way to refill them once they have been dried up or contaminated.

We are requesting that the EPA clean up the uranium mines that are -- currently have been permitted, and the old radium mines that are still open, to clean up the mess that they have already created.

We are also requesting, as someone from Standing Rock, to have true and meaningful consultation with tribes, not to just sit there and listen, but to have true, meaningful

consultation with tribally approved archaeologists and tribally approved surveyors, because (Speaking in indigenous language), the Black Hills belong to us.

They are historical, they are spiritually significant to our people, and we stand in opposition of the uranium mine.

Mni Wiconi. Water is life.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Locke.

Jacob -- your last name I'm probably not going to get right -- Helvick. I apologize up front.

JACOB HELVICK: That's fine.

(Speaking in indigenous language.)

I am Crying Eagle, but by the society, I am Jacob Helvick. I am from the Oglala Band of the Lakota Nation. And I would first like to say that y'all are crazy for even entertaining this at all, period.

Inherently the society has, since the get-go pretty much been inherent conflict with what would be the betterment of humanity, our animals, plants, trees, and Unci Maka, Mother Earth as a whole.

And one consistent fact that I think has just kind of sprouted out of virtually every single thing, whether it be pipelines or uranium mines or anything, all that, they pretty much consistently don't keep any sense of -- how would I say it -- basically any sense of, you know, making sure that everything is all good, everything is taken care of. It's always wound down to pollution.

You can ask the people of Flint, Michigan. You can ask the people of Corpus Christi, Texas. You can ask the people of my Dine relatives of the Navajo reservation.

It's the same consistency. These people are struggling, and this is happening all over the world. And at the end of the day, like many of my relatives, the Black Hills are -- are very sacred. And so is all of Turtle Island, and even our reservations.

And we have been in this long-standing issue of really working towards developing a platform for us to be at peace and be as ourselves, and this is another issue that brings up that conflict.

We know what's going to happen, and it's

going to keep happening unless we stand up and take the steps. And the only thing I would like to be able to say to you guys entirely is that you'll always hear concepts about being the change. And you have to basically be able to see like, Hey, this is not okay. This isn't going to pan out at all.

It's been the same thing, whether it be the genocide that took place against my people. It's the same thing with every single other issue that has been constantly present within all of the society, all of this country, all of every single country.

And I stand here entirely in opposition of uranium mining in the Black Hills.

(Speaking in indigenous language.)

REGIONAL JUDICIAL OFFICER SUTIN: Thank you. Next, if we could have Cheryl Angel.

CHERYL ANGEL: Good afternoon. My name is Cheryl Angel. I was born here in the Black Hills. I was raised in South Dakota. The past year I've been standing with people who wanted to defend land, who stood in defense of land and water at Standing Rock.

We didn't do it for nothing. All these

people here who came, they didn't come here for nothing. We have expectations. We have needs. And we're going to stand to make sure that the EPA doesn't approve this permit.

Everything that I've heard, if I was sitting in your shoes, I would have already decided to not grant that permit. And that's just using my common sense. That's not using the scientific facts. That's not listening to the evolution of mankind and all the geography that -- you know, that Creator made to keep water clean for us.

For tens of thousands of years, those aquifers have kept this land beautiful. It's sustained all plant life, all animal life, all humanity for tens of thousands of years.

Drilling into the Black Hills now is only going to result in the same thing that has already happened: Contamination. That alone speaks volumes. This area has been contaminated already -- already -- by allowing uranium mining. What part of that doesn't the EPA get?

The people here know it. They know it. They understand it. They are living it. Why are we going to condemn -- why is the EPA going to condemn the rest of the people who are going

to live here? Because that's what's going to happen if that permit is approved.

You're condemning, and you're allowing the contamination of the one thing that sustains us all, and that's water.

It's a scientific fact. Water is life. I mean, who is the EPA and all of these people? Who are they to say that, okay, money is more -- better? Money is more powerful? Money is more influential than life? Than -- water sustains life. That's a scientific fact. There shouldn't be any -- any question at all.

Just look at the history. There shouldn't be any question at all of what the uranium mining does to water, to the aquifer, to the people, to the landscape, to the future. There shouldn't be any question.

So I'm glad you're having this hearing because it falls upon you to use your common sense and to do the right thing and to use the facts to deny this permit.

Because that's the only result that makes sense. That's the only thing that we're asking you to do. That's the only thing that's needed to protect the Black Hills.

My people have been here for tens of thousands of years. We didn't contaminate this place. This place was stolen from us. It's been occupied by people who want to protect it. They're standing with us now. We're standing as one, for all humanity, for all plant life, for all life. We're standing up for you.

So don't be afraid to deny that permit. Whatever courage you have, remember you're not standing alone. You're standing up with thousands of people who want that water and who will back you up. So we're asking you to do the right thing.

That shouldn't be too hard to do with all of the facts that have been presented and all the testimony that's been given. Do what's right. You already know what it is. Don't fail us now. Do not fail us now. Because we'll stand behind you.

And we'll stand like this because we're here to protect the land and the water for the future.

(Speaking in indigenous language.)

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Angel.

Miengun Pamp. Can you spell your name for the record so we get it right. Thank you.

MIENGUN PAMP: M-I-E-N-G-U-N, P-A-M-P. Sorry. It's a bit of a mouthful.

REGIONAL JUDICIAL OFFICER SUTIN: That's okay.

MIENGUN PAMP: Honestly, I don't have a big stack of facts or anything to present. I was sent here on behalf of others. I'm from Michigan, just kind of wandering around the state.

But I was asked to talk about, you know, taking care of the wells that have already been put in that are, you know, poisoning people to this day.

You know, maybe you don't believe that they're doing that, but it needs to be addressed all the same. It's still there. I obviously say no to any further actions like this, no more permits or anything like that.

I thought it was funny that it was brought up that they said they were consulting with the tribes. I honestly just think that sounds like you're listening to us tell you no, and then you're going, Oh, well, thanks for your input,

and then, you know, just going to move on from there.

But what else was I asked... Sorry. It's just a lot to think about. You know, I mean, like, if you look at the oceans and stuff from the last time something happened in this, it's not exactly like we're talking about oil or something that can be cleaned up a little bit easier.

We're talking about something that's polluting mass amounts of water from one spill of something, you know, radioactive. So there's just so much, like, evidence that says that we shouldn't keep moving in this direction.

There are so many people that live in these areas that they can't go anywhere. This is their land. This is their home. Like, they have nowhere to go. They have no way to get there. Like, if this water, you know, goes bad, they have to stay. They have to deal with that.

You know, I see it back home, you know. I watch people from Flint. They have to go all over the place to try and start new lives because of what's happening there.

It's just a bit of a touchy subject, but...

Four things. I was also asked to discuss, let's see here -- oh, yeah. That's kind of out the window at this point.

I just hope that you listen to all these people that have put forth all this evidence, and, you know, listen to how passionately they speak about this. Because these are the people that have to deal with the choices that you make here today.

That's all I have to say. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Pamp.

Gena Parkhurst.

GENA PARKHURST: Hi.

REGIONAL JUDICIAL OFFICER SUTIN: Hi.

GENA PARKHURST: I'm sorry. I had a bit of a dry throat. I went to get some hot water.

My name is Gena Parkhurst --

REGIONAL JUDICIAL OFFICER SUTIN: Do you want to pull the microphone down, if that helps you.

GENA PARKHURST: My name is Gena Parkhurst, and I've been a homeowner in Rapid City for the past 11 years. I oppose ISL uranium mining in Custer and Fall River Counties because I am very

concerned about contamination of our groundwater.

This area is prone to drought, so water conservation is a priority. South Dakota's two largest industries, agriculture and tourism, depend on adequate supplies of clean water. Excuse me.

The United States Geological Survey, also known as USGS, has found that no ISL uranium mining operation has been able to return water quality to pre-mining cleanliness. The USNRC has been quoted saying that, "The restoration of an ISL-mined aquifer to pre-mining water quality is...an impossibility."

There are a number of factors that indicate a mine in the Dewey-Burdock area would likely result in contaminated groundwater. There are old uranium mines in the Dewey-Burdock area that are not fully reclaimed, enhancing the risk of groundwater contamination.

It will be impossible to have adequate oversight of the quality of liquid wastes pumped into the Minnelusa formation through the proposed deep disposal wells, resulting in likely groundwater contamination.

The proposed mine and deep disposal wells are in an area that is documented to have faults, fractures, breccia pipes. In addition, over 7,000 old boreholes have not been properly plugged in the proposed project area.

It will be impossible to contain mining fluids or waste liquids, and contamination of our groundwater is very likely.

I urge you not to exempt a portion of the Inyan Kara Aquifer from the Safe Drinking Water Act. The Inyan Kara is used by many people and livestock, and given the aforementioned risk factors, water contamination is likely.

I've heard that the Minnelusa aquifer has 125 drinking water wells in the southern Black Hills. That can be confirmed by the South Dakota Department of Environment & Natural Resources.

With uranium mining, we need to keep in mind the fact that the half-life of uranium is 4.5 billion years. Yes, that is "billion" as in B, like in boy. Untold numbers of people living now and those yet to be born could be affected.

As you are probably aware, in the 2011 legislature, South Dakota gave up its statutory

authority to oversee wastewater aquifer injection in ISL uranium mines at the urging of Powertech, now known as Azarga Uranium. Other types of mining in South Dakota, such as gold, oil, gas are regulated much more thoroughly than ISL uranium mining.

As a person with birth defects caused by exposure to toxic water while in my mother's womb at Camp Lejeune, North Carolina, while my father served in the Marines, I had no choice about what kind of water I was exposed to.

In my case, the brew of toxins resulted in birth defects that will forever affect my quality of life in significant ways.

Is it fair to the unborn to allow ISL uranium mining to start when we know that the USGS has found that water quality has never been returned to baseline after ISL uranium mining? Who will protect the unborn if we adults fail to do so?

I am not alone in my concerns. As you've heard earlier, the South Dakota State Medical Association has stated their opposition to uranium mining in the Black Hills in direct response to Powertech, now known as Azarga's

proposed ISL uranium mine, making it the second statewide medical association to publicly oppose uranium mining in response to a Powertech ISL uranium mine proposal in the past nine years.

And in 2013, the Rapid City Common Council passed a resolution expressing grave concern about the effect that this project might have on the Madison aquifer, a major source of drinking water for Rapid City.

Many Native American tribal organizations have issued statements opposing this project. In addition, local conservation districts have expressed concern.

In closing, is the reward of a few dozen short-term uranium mining jobs worth the risk of 4.5 billion years of water contamination in this drought-prone part of South Dakota?

Thank you for your time.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Parkhurst.

We're going to take a ten-minute break. We'll start back up at 4:52 [sic].

(Pause in the proceeding from 3:42 p.m. to 3:54 p.m.)

REGIONAL JUDICIAL OFFICER SUTIN: Our next

speaker is Alan McCoy.

AUDIENCE MEMBER: He's the real McCoy.

ALAN MCCOY: I'm Alan McCoy. I'm on the executive committee of the Black Hills group of the South Dakota Sierra Club, and we're opposed to this uranium mining project primarily because of the water issues that many people have already talked about.

We're concerned about both the extraction of the amount of water that's necessary for this project, but also the injection of the contaminated water back into the aquifer. Both of those are, of course, very bad for South Dakota, and I think both South Dakota and the U.S. gets very little benefit out of this project. It's a foreign company, as has already been mentioned.

The other thing that we're concerned about is... Let me gather my thoughts.

Well, actually I've said everything I want to say, so thank you for your time.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

ALAN MCCOY: Oh, I do -- I do remember one more thing that I wanted to mention, and that has to do with the -- no.

I've said enough. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. McCoy.

Next, if we can have Rodney Knudson.

RODNEY KNUDSON: Yeah. I'm Rodney Knudson. And I addressed my paper to "Dear Sirs"; I should have said "Mademoiselles."

But in any case, my experience is -- dealt -- deals with teaching physics, chemistry, and biology in high school. My master's degree is -- basically was done on, what is it, environmental, ecological curriculum. So anyway, my past experience involved working in a psychopharmacology lab on a tranquilizer.

It was called reserpine, and I worked on it for a year and a half, you know, whacking the heads off of rats and so on. And come to find out later, after all these 40 years later, looked it up in the Merck Index and find, oh, definitely a human carcinogen. So science at work. All right.

Anyway, I'm addressing the problem today, opposing the permit. Yesterday I printed off the 151-page EPA summation entitled "Draft Cumulative Effect Analysis of the Dewey-Burdock

Uranium In-Situ Recovery, Underground Injection Control Permit." I took the time to read it all day. And it was a good report.

And it says -- the report pointed a rather benign -- painted a rather benign picture of the mining process, ending with kudos for the small carbon footprint left by the power plants that produce that electricity from the enriched uranium.

Not mentioned was the enormous amount of electricity required to isolate uranium-234, -235, -238, generated by coal, oil, or gas power plants, but more importantly, toxic products of this process that we are creating with no safe place to put them.

The entire nuclear industry has left behind yet a toxic nightmare that has to be dealt with and has been systematically ignored and made a responsibility for the next generation.

What most people are concerned about is the sedimentation ponds -- speaking about the in-situ uranium mining process itself, the sedimentation ponds have a tendency to leak -- although the EPA report does address that -- and contaminate groundwater, which -- which has

happened in several ISL locations.

Migratory birds will land in these ponds. Insects will obtain water from -- of which becomes bird food. West Nile virus will become more prevalent because of the breeding opportunities for mosquitos.

And another concern is the in-situ mining process itself, which uses an oxidizing suspension lixiviant solution to release and suspend uranium in solution, but also suspends a number of other heavy metals, including arsenic, vanadium, selenium, et cetera, that are withdrawn with the uranium and wind up being precipitated in the sediment ponds.

We are told that TVA did a wonderful job of filling all these boreholes and so forth, but the other concern is numerous sweeps in the restoration phase leave -- put -- they remain -- I got it screwed up here.

Anyway, I'll just read on. The radioactive remains in those mined areas, like thorium and radium and presumably nonradioactive elements like lead, arsenic, and selenium, products of the reverse osmosis process, are precipitated out and sent to the White Mesa for them to deal

with, even though they are trying to detoxify that site as well.

Another use is -- another issue is water consumption, where the water is poisoned beyond any future use, although according to EPA reports, that might be kept to a minimum in the mining process by stripping the lixiviant by reverse osmosis and reinjecting the water. The restoration phase might be another matter, though.

REGIONAL JUDICIAL OFFICER SUTIN: Mr. Knudson, your time is up, so if you could wrap up, please.

RODNEY KNUDSON: Okay.

REGIONAL JUDICIAL OFFICER SUTIN: If you want to wrap up, you can.

RODNEY KNUDSON: Oh, I just have one --

REGIONAL JUDICIAL OFFICER SUTIN: Go ahead.

RODNEY KNUDSON: I will just finish up with my line.

We have made a Faustian bargain with the Devil by creating problems no one will be able to solve, and in the process, engaged in a collective death wish.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,

Mr. Knudson.

Mary Ann Fakler.

MARY ANN FAKLER: I'm Mary Ann Fakler. I'm a resident of South Dakota for 80 years. And I've always known that water was our most valuable product.

It bothers me to think that we would jeopardize our water source for a foreign entity to take our uranium. It might be different if we saw that as something that we needed to defend and protect for ourselves, but to play with the aquifers is a very dangerous thing.

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Florence Thompson.

FLORENCE THOMPSON: I'm just a citizen, but this is personal to me. I'm a grandmother, and my little grandson is six years old, is drinking water out of the Minnelusa and out of their well. And their place, I'm hoping that someday it will be his place, so maybe his whole life will be spent there.

And for him and for all the children, all the generations out there that are unborn, I think it's just wrong for so little reason to

jeopardize their safety and their health.

It would be different if there was some kind of national emergency and we really needed the uranium. But this is just for profit, and not even for American profit. It makes no sense at all. So I hope it'll be disapproved.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Thompson.

Mary Jo Farrington.

MARY JO FARRINGTON: Hello. My name is Mary Jo Farrington, and I live in Rapid City. I want to thank you for these hearings. I am not a scientist, but I am a mom and a grandmother, and I read quite a bit, except for Twitters, and it concerns me that our current President and head of the EPA both seem more interested in supporting fossil fuel companies rather than getting serious about climate change and protection of the environment.

And I realize it makes it even harder for those of you who are working in the EPA to do the right thing when you have that kind of leadership. But we can no longer write a carte blanche approval to greedy, poison polluters who have done the paperwork right.

We know better now. We know that mining has been both a plus and a very bad thing for our environment. And as I've sat today and listened to all the different people, most of us are talking from our heart about the morality of this, about, you know, the craziness of hurting our environment, and it makes me wonder what your role is in the EPA.

When I heard you do the PowerPoint up there, I really kind of thought you were representing Azarga. You know, you were explaining this all. I have been told that your Agency has not denied any permit of one of these permits, even though we all know better about their toxic harm and ruin to our environment.

So I guess what I'm asking you to do today is to delay any permits until you get all the facts. Many other people are going to be here talking about the scientific research that still needs to be done as well as we need more information from tribal consultation.

These permits do not benefit the United States. We don't need any uranium. The United States has a 200-year supply of uranium. So for us, it's all about protecting the water. For

Azarga, it's all about the greed.

And now this new development of having disposal wells will make Azarga a fortune because they are not going to make their money on uranium now, but disposable wells that no one is going to really be able to monitor after a while. This leaves us once again with a possible irretrievable mess.

South Dakotans do not want to be dumping grounds for toxic waste. No amount of assurances by anyone can guarantee the safety of our precious water, and I am incredulous that the EPA is also proposing to exempt the portion of the Inyan Kara aquifer from the Safe Drinking Water Act, which is necessary for them to be able to mine.

Why would we ever want to delete the Safe Drinking Water Act from any kind of mining? Why? Why do you want to make our water unsafe to make a few guys rich? I don't get it.

This week you will hear testimony that our Western South Dakota porous aquifers and caves -- and we've got to really include the caves because they are all intertwined and leak into each other. In-situ uranium mining

potentially contaminates a great deal, not only just underneath, but the topsoil and where our animals and birds are.

I urge you to require the necessary research before giving any more permits. Check out the cancer rates in Edgemont and Crawford, Nebraska. Require the water testing that several organizations want to do. And remember, practically every one of us in here are volunteers, and water testing is expensive. EPA could help us greatly with doing the correct amount of testing.

We've been in this fight for a long time. And I just want to -- it's already been mentioned, but I do want to put in the record for the -- about the City of Rapid City, who came out with the resolution. And it said, in essence, "Be it resolved by the City of Rapid City that due to the potential risk to the Madison aquifer, the City expresses grave concern about the proposed in-situ mining of uranium."

So I'd like to submit that to the record as well. And thank you very much. And just my last comment: The United States does not need

this, and the only way we can keep our water safer is simply to not allow these permits.

Thank you very much.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Farrington.

Uma Joanne Wilkinson.

UMA JOANNE WILKINSON: Good afternoon. My name is Uma Joanne Wilkinson. My Indian name is (Speaking in indigenous language).

And I want you to know, to the Environmental Protection Agency, that I'm sure there are good people among you, but I have little to no faith in your process. But I do have faith in spiritual laws and natural laws, and I do have faith in the people.

The Black Hills is still owned by the Lakota Nation, Oceti Sagowin, all the Lakota-Dakota. It is very arrogant for all of us to put and jeopardize life, all life, the environment. You say you're charged with environmental protection. Show us.

We know that uranium is used for a few things, namely nuclear power plants and nuclear weapons. We also know that Fukushima has been covered up, but it stands to contaminate the

whole western hemisphere. And we have uranium mines all over in every country.

If you allow this permit, you're going to live with it on your conscience because our people, our children, our relatives, our loved ones, the deer, the eagles, the fish, the water life will all be poisoned and contaminated, and it moves and it migrates.

The science that you are looking at has only been presented to you by this company. I want to know your independent scientists. I want to hear from environmental experts, conveniently left out, but you're the Environmental Protection Agency. You have not done due diligence.

All over the world -- Chernobyl -- mutations, cancers, leukemias, and death, because of one power plant. And everything humanity does can break down and fail, and science is not the answer.

There's no guarantee, none. So the decisions that you make, it's going to fall on your conscience, spiritually. You want to jeopardize all these people, this beautiful sacred Black Hills that doesn't even belong to

you.

You live in Denver. You're not going to feel any impacts. We know that our rivers all over South Dakota have been contaminated already by Edgemont and by Crow Butte. We're talking life or death.

And there's nothing. You don't talk about any true environmental impacts. There's no long-term studies that you've presented. There's no research on the biological health impacts of uranium and all the other isotopes that are released.

And it is very immoral. It is very unethical. It is insanity. And I'm angry about it because I care about the world. I care about this earth. We have one earth. How arrogant for anyone to think of allowing any company, whether an American or foreign, to pollute and desecrate and destroy this earth, our aquifer, with their chemicals, with their radiation, with contamination.

You can sit there very nicely. You have all the facts. But, you know, I don't trust the research, and I think that you failed the people with due diligence. I already know Trump fails

the American people, especially with his EPA nomination. We will be living the results.

Those of you that don't live here and a company that's foreign, why do we need more uranium? We need nothing more that has to do with uranium. We're playing with fire. And it's so interesting to me that Native Americans came and told the world leaders, "Don't ever dig up uranium. Don't bring it to the surface because you can't control it."

That's true today. Nuclear waste sites, Hanford, all over this country, there's no way to guarantee anything. I'm pissed, but we're going to fight.

And there's a lot of people that are going to stand up. Don't mess with our world, don't mess with our future, and don't mess with our environment. You're supposed to be a protection agency. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Wilkinson.

Gene Tyon.

GENE TYON: All right. Can you hear me?

REGIONAL JUDICIAL OFFICER SUTIN: Yes.

GENE TYON: My name is Gene Tyon. I grew up

on the Pine Ridge Indian Reservation, live in Oglala. And I've been living up here in our hills for the last 30 years. And I'm here to represent our youth, our unborn, and all living things that are on here on Mother Earth.

I did this similar talk in 2007 when you were here down at the Radisson, but apparently it didn't -- was swept under the rug, and I hope this doesn't do the same thing. I can feel that in the air that we're just here, and it's all going to be recorded and pushed under the rug again. I hope this doesn't happen.

Because of this uranium, in the last 30 years what's been going on in our hills here, I've been -- I know that -- I know in time there's going to be a natural shift in the earth here, and that's just going to go right into the water. It happens, you know?

And with that, why -- why do this? Why do this, what you are doing, you know? You know this is going to happen. You know this is bad for the environment, for all.

This is our -- this is our homeland here. Our creation story comes from the Black Hills, and we want to protect it forever, like I said,

for our youth and the many generations to come.

I don't have no data or no expert research reports, but just common sense telling us that we need our water, and we will be here to stop anything that comes in contact that you bring.

We're committed to -- this may be a first, but this is -- what would you do to stop something that hurts your children, that hurts your land, you know? We're going to do the same thing. We're not going to let it happen, no matter what -- what comes down.

So, just giving you a heads-up that we're here to stay. This is our land, and we're not going to let it happen.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Tyon.

Suzan Nolan.

SUZAN NOLAN: Thank you for the opportunity to address you today. I'm glad that you have come to Rapid City. It gives us all a chance to express some of our deepest, heartfelt feelings about this issue.

These are crazy times, and all of us feel a great deal of vexation about a President who has the value of exploiting our -- our environment

and supporting the wealthy. But what has happened as a result of this is that there are a lot of grassroots movements, from the women's movement to environmental movements.

And I'm here to express some of the common sense values of people from Dakota Rural Action, an organization who I represent today. There are 100 of us that belong to this organization. Our numbers have burgeoned since the uranium mining issue came up several years ago. And so I'd like to share with you some of our resolutions.

This is a resolution that Dakota Rural Action came up with in 2013. It represents our best thinking around this issue. And I'm not going to read it in the resolution language because that gets redundant and sounds stiff and formal, but here is a summary of what we've come up with:

Whereas uranium mining has polluted the Black Hills area and adjacent locations with hundreds of unclaimed waste sites -- and you've heard that addressed today -- uranium mining releases radioactive contaminants, extremely hazardous for over billions of years.

Uranium mining proposals currently threaten the Black Hills and surrounding areas with mine waste accident risks. Uranium mining entails private appropriation without compensation of the public water trust and contamination of precious land, water, air, and wildlife.

Concentrated radioactive uranium process material is stored at and shipped from uranium mining sites on public thoroughfares where accidents, theft, and spills can occur. Uranium mining is mainly for the benefit of foreign investors, nuclear power plants, and corporations, not us in South Dakota.

The governing council of the South Dakota Medical Association has voted unanimously to oppose uranium mining because of the risk to public health. Thousands of people from all over the world have signed a petition to the South Dakota Secretary of Tourism opposing uranium mining because it harms tourism.

And the Rapid City Council, as you've heard, related to has passed a resolution stating that they have grave concerns about uranium mining and its affect on water.

Therefore, Dakota Rural Action has resolved

that it calls for a moratorium, a complete moratorium on uranium mining in our -- in our area.

We ask you, the EPA, whose work I value -- I don't value who your leader is or who's the head of you. I think that's a very big conflict for all of us, and I think it is for you, too. But we ask you to help us achieve that moratorium of uranium mining in our state by refusing to grant these water permits.

Thank you for the opportunity to speak to you today.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Nolan.

Ray Groff. I hope I said that right. Ray Groff?

Okay. Christine Sandvik.

CHRISTINE SANDVIK: Hi. My name is Christie Sandvik, and I'm coming to you as a local resident, a scientist, a conservationist, and an American. I -- and I urge you guys to stand up against the uranium mining in the Black Hills.

I was born and raised in South Dakota, and I hold a bachelor's in science in global environmental science and a master's in

atmospheric and environmental science, and I worked in the -- at South Dakota School of Mines and Technology in the Biogeochemistry Core -- lab for three years.

I feel lucky growing up in South Dakota that I've had access to the Black Hills. Because of trespass rights, we have been allowed to have responsible and respectful use of the Black Hills, and I think that's very important.

I think it's important for us to remember that one person or group can really spoil the whole thing forever, and we shouldn't be allowing foreign companies to do this.

Water is incredibly vital, and the Black Hills are incredibly important to me. I've grown up in them, and I spend lots of time in them.

And I'm also concerned as a scientist. I have a paper from 2016. It was done in collaboration with researchers, Dr. James Stone and Dr. Sharma at South Dakota School of Mines and Technology, also with Dr. Putirka, who I am not as familiar with.

The paper is called, "Stream sediment geochemistry of the Cheyenne River" or watershed

within "the abandoned uranium mining region of the southern Black Hills, South Dakota, U.S.," and it was published in 2016 in *Earth Environmental Sciences* [sic]. And I want to read some sections from it.

First of all, they concluded that bottom sediments collected from Angostura Reservoir generally consist of suspended loads from the Cheyenne River basin, in which the mining locations are -- are housed in, I guess.

And they said that -- they determined that there was generally an increase of pollution load index as one travels downstream from the Cheyenne River and appears to coincide with sediment pollution transport from the upper catchment mine sites.

Contamination factors for uranium is elevated for all sites, including the Dewey uranium mines and the Cheyenne River and Angostura delta.

These findings further support that Angostura Reservoir uranium loading appears to be attributed to suspended transport from the upper Cheyenne River catchment, including areas impacted by historical uranium mining in the

region.

They use trace mineral signatures to determine origin, and they found that the highest uranium concentrations were found in the abandoned uranium mine sites and within the -- the Angostura Reservoir delta samples.

And anthropogenic activities, such as historic uranium mining, appear to be a significant contributor to contaminant loading within this historical mining area catchment.

And the one thing that I found very concerning in this is that they found the mining sites had a lot of uranium and also that the -- the river delta in Angostura did. And what they found was that episodic flooding events appeared to transport contaminated sediments from the mine sites surrounding the areas effectively, with very little accumulation or contaminant signature existing along the intermediate water courses.

So it might even be that these mining sites are contaminating areas, but because of the episodic flooding events that are common in the area, we're not really seeing a direct correlation for the areas that are contaminating

as -- as a result of this mining.

So it's very concerning for me. I've printed off an extra copy of the paper for you guys to take look at because I think that this is important. And I'm going to conclude by just saying the national parks, we always -- because we have trespass rights to them, it feels like as an American they're ours.

They belong to you and me, we have access to them, and they are ours to enjoy, and I can't imagine taking that away from us or making it so that we're unsafe in those areas. So please stand up against uranium mining in the Black Hills.

That's all. Thank you so much.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Is Ivan Looking Horse in the room? No?

Fremont Fallis?

Is Ivan here? Ivan, please come up.

IVAN LOOKING HORSE: Hello. My name is Ivan Looking Horse. I come before you for rejection and opposition of this uranium mining. I come here to speak for the animals that have no voice -- the deer, the fish, the buffalo.

We come through a long time of historic

trauma, and we survived so far from near extermination. We stood up in opposition to the Dakota Access Pipeline. We had over 500 nations come, over 600 flags. The value of water and life drove these people to come and stand with us.

And for us to have to do it again over and over, to open the eyes and the ears of the world, if we have to do it over and over to make it happen, we will. But this is something that even you that sit here listening to us have got to fight for also.

You have children. You have relatives. They are going to depend on the water. Now, we don't need no corporation or political people that live hundreds of miles away making decisions on our land, and so I come here hoping, praying that you will listen to the people.

We already have made a lot of contamination in our water already from the Homestake gold mine, the Cheyenne River. A lot of my relatives back home on the Cheyenne River Reservation have cancer, diabetes, a lot of illnesses due to the water that we're drinking.

And it's going to be even more so. I come from a family, White Buffalo Calf Pipe. Our first keeper lived to be 450 years old, and today, because of all the contamination in our world, it's between 35 to 75 years old. And it will get even less and less if we allow these here contaminations to happen.

You're going to have a lot of birth defects in young people with no compassion for life. And so we have to do something for the future generations. My ancestors were fighters. Both my grandpas, you know, Crazy Horse and Sitting Bull, and they fought for their people.

It's an honor to die for your people, for something worthy, for life. And so I hope that nothing happens here. This is our sacred lands here. This is our creation story that started. Our people came from Wind Cave. And this is where life began for us.

We came on top of the world with the buffalo. The man and the buffalo came from Wind Cave. We had a great race around these Black Hills and the two-legged won. So here we are. Maybe if the buffalo won, we wouldn't have poisoned water or poisoned land. But we won.

So now we have to keep this land in balance and harmony. So whatever we do today, the decisions we make, affects the future. And so I hope everybody in this world, in this room puts out the word. We can do the right thing here for the people, for the future. Because if we don't do that, this world will be lost.

Our grandfathers prophesied that the seventh generation is a turning point, and we're at that turning point today. So either bring back the balance to the world or lose it. These are messages that our grandfathers gave us.

And so I know that all the people that have a heart for the future generations will stand up and fight, because this is something that we all want. And it's not up to the very few political people, the billionaires that are in charge, corporations to destroy our world.

It's our hope that we can all find it in our heart to reject and oppose this uranium mining and everything that is contaminating our world. So again, a'ho. Thank you for listening to me. Wopila.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Looking Horse.

Fremont Fallis. Fremont Fallis.

Okay. Drey Willier.

DREY WILLIER: (Speaking in indigenous language.)

My name is Drey, and I'm from the Cheyenne River Sioux Tribe. I'm here to stand up for the water and for all living things that drink this water.

And it's obvious that you guys don't know the value and how important this water is to, not only the people, but to all living things on this earth.

To look at the plants for example, you can't water them, they can't grow without water or they can't grow with contaminated water or any -- any kind of a chemical that's not supposed to be in the water.

And to that, like -- like, they can't grow and they can't sustain their life because they are drinking that kind of poisoned water. And eventually the animals, they drink that water. And the animals that prey on the other animals, they are also passing that contamination on.

So it all has -- it doesn't have to be just the water. It has to do with all -- all life.

You know -- yeah.

There's a prophecy, the Black Elk's prophecy saying that the seventh generation will come back and save this world and make changes to it. And as part of the seventh generation, it is our duty to -- my duty to protect our water, protect our way of life, and protect all living things. No matter how small or how big they may be, we will always protect them. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Willier.

Paula Antoine.

PAULA ANTOINE: Good afternoon. My name is Paula Antoine, and I'm from Rosebud. I'm a Sicangu Lakota, and I'm part of the Oceti Sakowin. I'd like to thank you for this opportunity to come speak with you. I spoke in Valentine as well, but there was a couple other ideas that I thought were very important.

We have several, many Lakota language and Dakota language speakers that come in, and I notice that you use a transcriber. So I was wondering how you transcribe their testimony when they speak in our native language.

And I would like to ask you for the

opportunity for a translator for that, for the hearing and for the transcribing, and have that approved by language speakers so the translation comes out to the correct meaning that they're intending with their testimony.

And so I'll reiterate a couple other points that I had made down in Valentine, that we're asking that there be no permit, no expansion, no additional uranium permits until the other uranium pits that are -- the other uranium mines that are out there have been reclaimed and that they are proven safe to the public and to the water and the wildlife.

Also I would like to say that we would like a tribally approved consultation, defined by the tribes.

And I think my last point would be tribal consultation, no -- I had four points that I wanted to make, but I think that was the most important one, is no mine, no expansion.

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

I have two speakers who I called who weren't here. I'll call them again.

Ray Groff. No?

Fremont Fallis.

So those are all the cards we have for people that wanted to speak this afternoon. We still have some time. So if there is anyone who is interested in speaking, if you want to fill out a card, we'd be happy to hear your testimony.

Is there anyone who would like to speak? Okay.

They're right out -- yeah.

Would you like to finish?

I am going to recall Mr. Knudson. Okay.

RODNEY KNUDSON: Rod Knudson again.

REGIONAL JUDICIAL OFFICER SUTIN: Mr. Knudson, if you can speak clearly into the microphone so the court reporter can get your words. Thank you.

RODNEY KNUDSON: Yeah, okay.

What I see is the worst part of this question though is that the mining phase is just the start of a horrifying development that results in ever more toxic next phases of the uranium story.

Uranium hexafluoride leaks in the separation phase, the electrical generation using the

enriched/blended uranium-235, military uses that have poisoned countless people worldwide from the fallout and bio-accumulation of radioactive nuclides, especially cesium-137, strontium-90, iodine-131, plutonium, et al., and others, producing cancers, such as lymphoma/leukemia, bone, pancreatic, liver, lung, brain, colon, skin, and breast, which have been dramatic -- which have seen dramatic increases after the 1300 open-air nuclear tests.

Exploding nuclear power plants, like Three Mile Island, Chernobyl, and now Fukushima, which is an ongoing disaster that won't be stabilized for 40 to 100 years and continues to gush hundreds of tons of radioactive water into the Pacific every day, ultimately biologically magnifying into the fish and the humans that eat them.

Cancer rates in Japan are now just becoming apparent as we see children being affected by what is called a Chernobyl heart disease caused by cesium-137.

We have our own Fukushima potentially waiting for us at the Indian Point reactor just above New York City, also subject to the effects

of earthquakes. Given the artificially extended lives of our aging nuclear power plants, are more events going to happen? It is just a matter of time before we find out.

And now we have high-level nuclear waste with no place to go. Oh, yes, of course. We have Yucca Mountain, which will be a disaster because it is not sealed off from water incursions.

But we would have to have dozens of Yucca Mountains to take care of the waste that's sitting around just the 104 nuclear reactors in the United States. And then it had to be safely transported. The American-built sheet metal casks that can last about 30 years, but the German-built cast iron ones seem to last much longer and don't seem to crack with age.

Don't leave out the military uses, of course. The Nagasaki/Hiroshima experiment is still with us, as are the depleted uranium particulates being enjoyed by the Iraqi people to the point where they are afraid to have children in some places.

The high-level waste from Word War II is still sitting in giant pools and, with time,

leaking into the Columbia River.

Now we want to invest a trillion dollars in making nuclear weapons over a 30-year program to make them more user-friendly. We have made a Faustian bargain with the Devil by creating problems no one will be able to solve and, in the process, engaged in a collective death wish that might be granted earlier than we thought with the present administration filling agencies at the top with administrators who are ignorant and hostile to their missions.

Like the people on the trains to Auschwitz, we have to ask ourselves, "Where are we going?" before it is too late. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Knudson.

Crystal Hocking. Sorry if I'm getting that wrong.

If you can say your name and spell it for the court reporter.

CRYSTAL HOCKING: Crystal, C-R-Y-S-T-A-L; Hocking, H-O-C-K-I-N-G.

I have a bachelor's and master's degrees in geology, geological engineering. I am a registered professional engineer and

professional geologist. And I originally was working on this project -- just a disclosure -- approximately nine, ten years ago, collecting fieldwork for groundwater, surface water, and geology.

I have also reviewed ISR permits for the state of Wyoming, and so I'm really familiar with the entire process. And I would just like to say that there -- I believe in science and the engineering technology that, you know, can make this process safe and effective, and that I have no insecurities or issues with this project going forward.

I think it's one of the safest locations in the U.S. to have this location. I have sampled the water out there. I've seen the results of the radium and the radon in the samples that are already way above EPA standards. I mean, this is not, you know, drinking-water quality that we're dealing with.

This is water that's in a uranium ore body. And that's why I feel like, you know, this project is not going to contaminate the water. It's not going to make it worse. It's already worse. And so I just wanted to say I approve of

this project, and that's it.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

(Negative feedback from audience members.)

REGIONAL JUDICIAL OFFICER SUTIN: I'm sorry. I'm sorry. We have to be very considerate of everyone who speaks. Everyone should feel comfortable speaking here, so I will ask that you hold your remarks like that.

Next, Kristopher James.

KRISTOPHER JAMES: Ya'at'eeh abini.

My name is Kristopher James. I am Dine from the Dine -- from the Navajo nation down in Arizona. My -- I come from the Yoo'o Dine'e Todich'ii'nii. I was born for Kinyaa'aanii. And I came here to speak on behalf of my people.

A lot of us are lost in the fracking minings down that way from the coal mines and the uranium spillage that is spilling into our waterways that is now water waste. And so, pretty much, our water source is -- is just straight jacked.

And now I was inspired by my brother, Ezekiel, to come up here and stand with the Cheyenne, the Sioux, Lakota/Nakota/Dakota. Because growing up, all I've seen from the law,

from what we are supposed to entrust our faith into, what we call a diplomatic system of justice, as politicians or bureaucrats would call, but all I've seen was corruption, oppression on my people. And I see the same in the Sioux Nation.

And so if this project is granted its permit, there will be people like me to stand in its way to fight to the fullest. And out of this will only be sorrow, grief, bloodshed, more hatred and distrust for our government.

And all my life, I despised the U.S. government for its oppression and colonialism that it has spread in this ground that we call home, the indigenous land that we now call home.

And so in my opinion, I would have to deny the permits for this mining project.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. James.

Margaret Ross.

MARGARET ROSS: Good afternoon. 

I had no plans on speaking today because of my voice is giving out and -- however, I just wanted to add to what many of my relatives were talking about today. When they talked about, I

listened to my leksi talk about the 1851 and the 1868 Fort Laramie Treaties.

I listened to one of my other uncles talk -- or two of my other uncles talk to you about creation and what creation means to us and what the Black Hills mean to us and then about what water means to us.

My friend was talking earlier, and she was nervous about what should she say, and I was teasing her, giving her all kinds of things to say that would probably get her thrown out of here, and she was wise not to listen to me.

But I wanted to -- I was thinking about something all while everyone was talking, and I really appreciate all the scientific words and testimony that was given today because I appreciate that. I appreciate all the people that have come and talked about the morality of this issue that we're facing.

And I'm -- I'm from here. I'm born from this soil. And when I -- my spirit leaves, my body will be placed back to the soil. I have two children and two granddaughters, and I was thinking about them, like maybe I should say something on their behalf because nobody else

is.

I mean, we're in here, we're all speaking for our children and our grandchildren and our grandchildren that haven't even come here yet. And so we're trying to talk about what this means to us and to them and the reality of why we're even here talking about this.

And it's not even -- it's important to us, but it seems like in this whole world of corporate rule, that it's not even important to that part of the world.

And then I wonder, like, you know, and you guys probably know about this, that last year for a really long time, there was an encampment that was in North Dakota, right? And people gathered, and they protested, and we defined water-protectors. And so a lot of people here are water-protectors. We come here to protect our water.

And so I wanted to share with you that if you could think about some time ago, it was a pretty long time ago, that the story is, like, told to me from my grandmothers and my grandfathers and from many of my relatives that they probably heard it the same way.

But a long time ago, there was a time before everything, and in that time, there was nothing but darkness and Inyan. And Inyan is the one that made creation. And Inyan made Unci Maka. And in order for her to survive, he had to sacrifice his own life, and he did, and he gave her water so that she could live.

And so that story is important to us, as all our creation stories are important to us. And so when you think about what does that mean, do we have value? Is there a value in our story? Because water is life.

Someone said, Oh, that's just an easy saying. They chanted it earlier, you know, "Mni Wiconi." That's what we know. It's a philosophical belief that we have. Water is life. And without it, none of us are going to be able to survive.

And South Dakota, we're kind of a crazy state, right? We're red and we're blue and we're whatevers, but I'm really happy to see that today we can come together as South Dakotans and as Lakota people and as humans, come together and say we need to protect our water.

This morning I was looking and listening to the birds singing this morning. It's really a pretty thing to hear. And then I was watching as animals, rabbits, you know, they like to race to see if they can outrun you, and I always have to let them win, you know. I let up on the gas and let them cross.

The prairie dogs doing the same thing, watching that. Life is a miracle. Everybody believes that. We all say that. And so I ask you to not allow the permit and give us our life. Let us live. It's crazy that you two get to sit there and have this decision, and you have to listen to all this testimony. It's really absurd actually.

And I think that we deserve the right to live. We all do. You do deserve to live, and maybe your grandchildren will come and live in the Black Hills one day, and they should have the right to live, too. And so that's what I ask.

I also ask that you give meaningful tribal consultation because this is treaty land that we're talking about. So thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,

Ms. Ross.

So it is 5:00. We are going to break for dinner for an hour. We will be back at 6:00, and we will start the hearing again at 6:00. We will begin with opening statements, as we did when we started the hearing at 2:00.

But anyone who wants to speak who hasn't, please take the time then to speak. And if you spoke earlier and would like to speak and there's time, we're happy to take your testimony. Thank you, and we are closing this session of the hearing.

(A recess was taken from

4:59 p.m. to 6:07 p.m.)

REGIONAL JUDICIAL OFFICER SUTIN: My name is Elyana Sutin, and I'm the Regional Judicial Officer for the Environmental Protection Agency in Denver, Colorado. Thank you all for coming tonight.

I will be chairing the hearing today. And in addition to myself, there are other EPA staff here to assist in this hearing to ensure that everyone who wants to speak has the opportunity to do so.

So I'd like to introduce them before we get

started. Douglas Minter, standing in the back of the room, waving. Douglas is manager of the Underground Injection Unit in the Office of Water Protection in Denver.

Valois Shea, to my right, works with Douglas in the Underground Injection Unit.

Lynne Newton is outside the registration table, and she can help you if you need anything out there.

Lisa Vanderpool-McClain just walked in. She's standing at the door. She is our Public Affairs Specialist in Office of Communications.

And then we also have Sisay Ashenafi, who is also out at the registration table -- oh, there's Sisay. Sorry. Didn't see you back there. He's back -- in the back. So please talk to any one of those folks if you need anything.

So on March 6, 2017, EPA issued two draft Underground Injection Control, or UIC, area permits to Powertech USA, Inc., for injection activities related to uranium recovery near Edgemont, South Dakota.

The draft permits include a UIC Class III area permit for injection wells for the in-situ

recovery of uranium and a UIC Class V area permit for deep injection wells for disposal of treated in-situ recovery processed waste fluids.

The EPA is also proposing an aquifer exemption approval in connection with the draft UIC Class III area permit.

We are here today to listen to your comments on these area permits and aquifer exemption. The public comment period is open until May 19th, 2017. In addition to this hearing, we will be holding three more hearings this week.

Tomorrow we are here again at the Ramkota from 1:00 until 8:00. 1:00 to 2:00 is an information and question time that folks will be here to answer any questions you might have. From 2:00 to 5:00 we will open the hearing and take testimony. We will take a break from 5:00 to 6:00 and then have testimony again from 6:00 to 8:00.

All of these hearings, this one tomorrow as well as May 10th in Hot Springs, South Dakota, at the Mueller Center; and on May 11th in Edgemont, South Dakota at the St. James Catholic Church are all opportunities for folks to give their testimony.

For more information on the times and location addresses, you can visit the registration table or go to EPA's Website.

In a moment, Ms. Shea will explain in more detail what was proposed in the notice. But before I turn it over to her, let me explain a bit about how we will work this evening through the hearing.

As I said, we'll take testimony from 6:00 to 8:00. I will call speakers to the microphone who have filled out a card at the registration table.

When it is your turn to speak, please state your name before you begin your testimony. We will allow five minutes for folks to speak. We will signal to you when you have a minute left, and then when five minutes is past, I will ask you to complete your testimony.

Please try to be as succinct and on point as you can. If I find that we are straying from the topic at hand, I will interrupt and ask that you please return to the issue before us.

If we have time at the end and everyone has had the chance to speak and you have more to say than your five minutes that you are given, I

will allow you to come back up and finish your comments.

After you finish your testimony, we members of the panel may ask clarifying questions. We are not here to explain the basis for the proposal. The notice does that. Nor can we engage in a back-and-forth discussion of the proposal or respond to your comments during this hearing.

The purpose of the hearing is to receive your input. We will consider and then respond to all comments received during this hearing as well as all written comments in the final permits and aquifer exemption determination. We will not be answering any questions during the hearing.

We are recording the hearing tonight, so be assured that your comments will be considered. The court reporter sitting to my left will be preparing a transcript of today's proceeding that will be available for anyone who wants to see it.

The transcript is part of the record and will be included in the docket for this matter. The docket is where EPA collects materials it

has considered in its action, including public comments.

The docket is available on the internet for your review, or you can view a hard copy at EPA's Denver office. The transcript of this hearing will also be available in the docket. If you have written copies of your testimony, please give a copy to our staff at the registration table, or you can bring it to me. This will be helpful as we prepare the transcript.

If you have other written comments or supporting documentation, you may leave those with us as well, and we will make sure they are entered into the docket for this proposed action. You also may submit written comments directly to the docket through May 19th. Instructions for submitting comments can be found at the registration table.

Once the final permits are issued and the aquifer exemption determination has been made, anyone who participated in the hearing through written comment or oral testimony has the right to appeal the Agency's decision to the Environmental Appeals Board.

I will now ask Ms. Shea to provide additional information. Thank you.

MS. SHEA: Thanks, Judge Sutin.

And thank you all for coming here tonight and participating in our public hearing. And I'm just going to take a few minutes to provide a context for the comments that we will be hearing tonight.

So I'm going to explain some of the more salient points of the permit requirements. And for those of you who have already heard them, sorry about that. Just bear with me, and we'll get through this.

So I want to give you a little information about the Underground Injection Control Program. It's authorized under the Safe Drinking Water Act. The mission is to protect underground sources of drinking water from injection activities from injection wells.

I want to give you the definition of underground source of drinking water from our regulations. It's an aquifer or a portion of an aquifer which supplies a public water system or which contains a sufficient quantity of groundwater to supply a public water system; it

currently supplies a drinking -- currently supplies drinking water for human consumption; or it contains fewer than 10,000 milligrams per liter total dissolved solids.

The UIC Program classifies injection wells under six classes based on the type of injectate and the purpose for injection. Our UIC regulations also allow us to exempt portions of USDWs for certain conditions, one being, as we talk about tonight, for an economically viable mineral resource.

So as Judge Sutin mentioned, the Region 8 UIC Program has issued two draft permits on March 16, 2017. One draft permit is the Class III injection well permit for the in-situ recovery of uranium.

The second draft permit is a Class V permit for the disposal of ISR waste fluids treated to meet the standards for radioactive waste and hazardous waste.

The EPA is also proposing an aquifer exemption to exempt those portions of the Inyan Kara aquifers that contain the uranium deposits from the protection of the Safe Drinking Water Act in order for the Class III injection to

occur to recover uranium.

We also released a number of other documents related to these actions. One is an Environmental Justice Analysis. Another is a draft Cumulative Effects Analysis. And then we also issued a draft document explaining the process and the considerations for tribal consultation. We are still underway with our tribal consultation process.

All of these documents are open for your review and comment, but the most important documents to focus on are the permits, as these will be -- if the final permit decision is issued, we want to make sure that we have protective permit requirements in place for this type of injection activity.

There are other agencies regulating the site in addition to the EPA. The Nuclear Regulatory Commission has issued a materials license for the whole site. The South Dakota Department of Environment and Natural Resources has a large mine permit that they have proposed, but they are not yet finished with their public review process.

The Bureau of Land Management has a plan of

operations that they are considering for portions of the site that belong to them. And then once again, the South Dakota Department of Natural Resources has proposed a groundwater discharge permit for the land application of treated ISR wastes if it can't all be handled by the Class V deep injection wells.

So this is a map of the entire site, just to acquaint you with some of the more important features. We have the permit boundary here, the South Dakota-Wyoming state line. We have the Custer County-Fall River County line that crosses through the middle of the project area.

Here is the Cheyenne River and the Beaver Creek drainage. Both of these water features are going to be monitored under the NRC permit and the DENR permits.

These are the well fields in the Burdock area where the uranium deposits occur, and these are the proposed well fields in the Dewey area. These dots represent the locations of the deep Class V disposal wells in the Burdock area and the Dewey area.

The color codes in these well fields represent the different aquifers where the

uranium deposits occur within the Inyan Kara group.

So this drawing shows you the pattern of the well fields in the uranium ore deposit. The grids represent the locations of the injection wells and the production wells. Because these types of wells can change their role throughout the process, the EPA is regulating all of these wells as injection wells.

In addition, there is this ring of monitoring wells that looks at the movement of water towards the well field, and also is used to look at any contamination or excursion that might be escaping out of the well field area.

And this green line is the aquifer exemption boundary that is located 120 feet outside of the perimeter monitoring well. These symbols represent where overlying monitoring wells occur in overlying aquifers, and then also underlying monitoring wells and underlying aquifers.

I'd like to talk about the water quality in the Inyan Kara aquifers. The Inyan Kara is high in sulfate manganese and in some places iron. The people who drink the water often treat it using reverse osmosis so that it will taste

better.

Within the uranium ore deposit areas, there's also high levels of gross alpha radium and radon, above drinking water standards. The radioactive decay of uranium eventually results in radium over a long period of time, but once it reaches radium, that quickly decays to radon and a series of daughter elements which emit alpha radiation.

Alpha radiation can be blocked by the human skin, but untreated water, if you are taking a shower or washing dishes, these daughter products you'll breathe in, and that can cause lung damage, internal damage. So that's the type of water quality that is inside this aquifer exemption boundary.

This shows a cross-section through the Inyan Kara group that shows you the aquifers that are being exempted, and each of these aquifers contain the uranium deposits in the locations that you saw in the previous slide.

This shows the pattern, again, of the well fields and the perimeter monitoring well rings. But I just wanted to explain a little bit more about the ISR process.

So the injection wells inject a lixiviant that's composed of the Inyan Kara groundwater with carbon dioxide and oxygen added to mobilize the uranium, which flows to the production wells and carries the uranium off to the central processing plant where the uranium is removed with ion exchange treatment.

And then the groundwater is recycled back. So most of this groundwater is returning to the Inyan Kara aquifer, and only a small percentage of that is actually lost to the Inyan Kara aquifer.

I want to emphasize that if the EPA does decide to approve these permits, that doesn't mean that Powertech automatically gets to begin injection activity. The permits require extensive geology and hydrology characterization, and one of the most important parts is this well field pump test. And that consists of a pumping well that's inside the area where the ore deposit is located, and that well is pumped.

These lines represent the groundwater level of the unpumped aquifer. If during the pumping of the well, the groundwater level is depressed

in this area, that indicates that the confining zones above and below the injection zone are adequate and that horizontal control inside the aquifer is possible.

So the big question that the EPA is looking for in the lot -- in a lot of data that they are requiring under this permit is, can these uranium-bearing fluids be contained within the injection interval.

So there's a lot of data involved in with these pump tests, and we'll be looking at that very carefully before we make any decisions about whether or not injection can occur.

Similarly, under well field operation, we expect to the see this groundwater table depressed, and that will show us that we have the inward flow of groundwater towards the well field area, and that shows that there's horizontal containment.

We also have monitoring wells above and below the injection zone to make sure there's no vertical migration across the confining zones.

If the groundwater starts to drift out of that area, we'll see that first in these perimeter monitoring wells. We'll see the water

level rise before any contamination leaves the area, and that allows -- it's like an early warning detection system so that the flow of groundwater can be reversed and contamination can be contained.

So this just emphasizes again that even if the decision is to issue these final permits, Powertech has to perform a lot of geologic and hydrologic characterizations to verify that no migration of injectate will incur into the USDWs.

So the Class III permit includes a long list of requirements, but I wanted to just pull out a few here. We want to see a map of all the plugged and abandoned exploration drill holes within the well field perimeter monitoring ring. We want them to identify any exploration drill holes that they had to replug because they were improperly plugged in the past.

And we want to see copies of any new or historic drill hole logs that have been annotated to show the presence of any fault, fracture, or joints that have been noted by the drillers as they drilled the well and logged them.

The UIC regulations do allow ISR operations to occur within areas where there are breaches in confinement zones, but if that is the case, then additional monitoring is required around these areas.

This graphic shows an example of an unplugged historic borehole that is not able to be, for some reason, reclaimed, and so this is a known breach. We will require additional monitoring wells in this area so that if any migration out of the injection zone occurs, it will be detected by a number -- more than two, that's just for the cross-section -- more than two monitoring wells in this overlying aquifer so that we have early detection of contamination migrating outside the zone and it can be corrected as required under the permit.

So one of the most important aspects of this permit is the post-restoration monitoring. This is new to the ISR industry and what -- how that works is, after -- after the interior of the well field is restored under the Nuclear Regulatory Commission license requirements, then the EPA wants to ensure that no contaminants that remain in this well field will cross the

aquifer exemption boundary into the USDW.

Now, that requires identifying baseline constituent concentrations, which will become the permit limits. These requirements were developed by the EPA when we were reading the responses to the -- of the public to the NRC license.

And that gave us an indication that we needed to be more rigorous in determining what our permit baseline limits would be, and in monitoring this aquifer exemption boundary to ensure that no contaminants will cross it after ISR reclamation is done.

So the baseline monitoring is based on a long-standing document developed by the RCRA program that develops a statistical method for determining baseline, and also determines a statistical method for identifying when a contaminant is potentially crossing an aquifer exemption boundary.

I'm going to move to the Class V deep injection wells. So once again, the Class V permit requires the most protective well construction requirements under UIC regulations. So although this is a Class V well, we are

requiring Class I well construction standards because they are the most protective.

There are numerous requirements for rigorous geologic and hydrologic characterization to verify that any injection activity will not cause migration of contaminants into the overlying or underlying underground sources of drinking water.

In order for injection to occur, Powertech has to demonstrate that the Minnelusa does not meet the requirements of underground source of drinking water. So this means that if Powertech drills into the Minnelusa and finds that the total dissolved solids is greater than 10,000 milligrams per liter and the Minnelusa is a USDW, then the permit cannot be used because this permit does not authorize any injection into an underground source of drinking water.

And then because it is a Class V permit, which means that it's injecting into or above a USDW -- in this case, it's injecting above the Madison aquifer -- the injectate has to be treated below radioactive and hazardous waste permit limits.

This cross-section just shows the geologic

layers from the Precambrian basement through the Minnelusa injection zone. Here's the Madison underground source of drinking water, and then this area here is a confining zone between the injection zone into the Minnelusa and the Madison USDW.

And then this area is the overlying confining zone that separates the Madison -- or the Minnelusa injection zone from the Hunkpapa and Sundance aquifers, and then these are the Inyan Kara group aquifers.

I just wanted to explain a little bit about the breccia pipes that you've been hearing about. They form because the Madison limestone is high pressure -- has a high water pressure inside this aquifer. And near the outcrop, where the Minnelusa formation occurs at ground surface -- and you can actually see it on the ground -- the overburden has -- is disappeared or is very thin here.

And the Madison limestone water pressure actually pushes up through the Minnelusa formation. It dissolves anhydrite, which is the predominant mineral inside the Minnelusa formation. It's a sulfate mineral that causes

the total dissolved solvents in the Minnelusa to be very high because of the sulfate.

And so downgradient of this area where this dissolution is occurring, called the dissolution front, you see high total dissolved solids in the Minnelusa and high sulfate.

Above this area, where the Minnelusa occurs closer to the surface, you get -- the anhydrite has been dissolved away by the Madison water flowing up. You get really good water quality in that portion of the Minnelusa Formation, and that's where you see the drinking water wells occurring, because it's -- there's not a lot of sulfate. The anhydrite is gone. And this is where you find good drinking water quality inside the Minnelusa.

Okay. This is a map that shows the location of that dissolution front. Here is where the Minnelusa Formation occurs at the surface. All this area is where you'll find your Minnelusa drinking water wells that are low in sulfate and total dissolved solids.

The Dewey-Burdock project actually occurs six miles below the dissolution front, where the anhydrite is still present, and that causes high

sulfate in the Minnelusa and also high total dissolved solids.

So that is why we do not expect the Minnelusa to be classified as an underground source of drinking water, but that will be verified under the permit, as I explained earlier. We will have to wait and see exactly what that total dissolved solids value is.

Another way to look at the confining zone that I was talking about is all of these dots represent historic oil and gas wells that were drilled. This area is the Barker Dome Oil Field, which is an active oil field. Most of these wells have logs that show where the anhydrite is present, and you can get a look at how thick that confining zone is in the Minnelusa above the injection zone.

So the EPA has included additional characterization into the -- of the confining zone that we don't normally have in our deep well permits, and those include, in addition to the drill logs from the deep Class V wells, we also looked at the numerous plugged and abandoned oil and gas wells that I showed in the previous slide.

We're going to look at the groundwater levels of the Minnelusa and Madison aquifers. As I mentioned earlier, the Madison aquifer is a very high-pressure aquifer. Its groundwater level, if you were to put a well into it, that would allow it to flow actually to the surface because the pressure is high enough to flow to the surface.

The Minnelusa aquifer is a much lower-pressure aquifer. We expect that water table to be much lower. And we expect to see the difference in these two aquifer potentiometric surfaces or groundwater levels that demonstrate that they truly are confined and are not in communication with each other.

Another thing to look at, as I mentioned earlier, is the sulfate concentration. We expect it to be high in the area where that anhydrite is still present and helps form a good confining zone.

And then when we look at the Madison and Minnelusa water chemistry, we expect to see it very different -- look very different as far as the elements in the water.

Where you are closer to the outcrop and the

Minnelusa is actually used as a drinking water source, it looks more like the Madison in its water chemistry. Further downgradient where there is still the anhydrite present, the water chemistry looks very different.

I just wanted to mention a little bit about the treatment ponds. The only radioactive waste expected to see in ISR waste fluids is radium. Because it's a Class V permit, that requires treatment of the injectate below radioactive standards. Powertech will have to treat the ISR waste fluids to remove radium.

The way they do that is to add barium chloride, which is proven to be a very effective way of getting the radium out of the waste fluids.

So the barium chloride will be added and then mixed, and then it will sit in these ponds and react, and the radium will precipitate out. Then the treated effluent will be held in these outlet ponds, which then lead to the deep Class V injection wells.

I just want to emphasize again the importance of our public comment period and these public hearings especially. The reason we

issue these draft permits is so that we can show you what our best attempt is at providing extra protection for these aquifers, but we want your input on that. We can't think of everything.

We know these permits aren't perfect by any means. So this is just a way for you to review what we've done and then give us the feedback of what you want to see different or whether you think these permits are going to be effective in protecting underground sources of drinking water.

Our regulations require that we do a 30-day public comment period and then hold a public hearing if the public shows interest. In this case, we are very serious about getting your input, and we have extended our public comment period. Uh-oh. What did I do? Sorry. It was supposed to be this.

So it's gone from March 6 to May 19 because we know there's a lot of information for you to review. And we've scheduled five days of public hearings because we want to hear from you in person about your thoughts on these permits, and now let's just get to that.

Thank you very much.

REGIONAL JUDICIAL OFFICER SUTIN: All right. We are going to get started. First speaker, if we can have Sylvia Lambert.

SYLVIA LAMBERT: Sylvia Lambert.

What is Azarga/Powertech? Azarga Resources Limited, is a Canada-based, China-led company that has never mined uranium. After owning part of Powertech since 2013, it is now merged with Powertech to form a new company named Azarga Uranium. The new ownership controls Powertech's operations in South Dakota, as well as uranium interests in Colorado.

Azarga's largest stockholder is Platinum Partners, a hedge fund that is based in the Cayman Islands. Seven members of Platinum Partners's leadership team, including its founder, Mark Nordlicht, have been charged in federal court in New York for a $1 billion fraud and for running what the media has called a Ponzi scheme. This makes the status of Azarga uncertain.

The former investment banker who heads Azarga Resources is Alexander Molyneux, who was born in Australia. Molyneux left investment banking and entered the mining industry with the

help of Robert Friedland, a dual-citizen of the United States and Canada who lives in Singapore. Friedland is known by some as, quote, "Toxic Bob," partly for his role in the disaster at the Summitville gold-silver mine in Colorado.

The Summitville mine was run by a subsidiary of Friedland's company, Galactic Resources. It is now a Superfund site that discharged acid drainage and cyanide, arsenic, cadmium, copper, lead, mercury, and other heavy metals into the Alamosa River. Friedland's bankrupt subsidiary pled guilty to 40 felony counts. Cleanup, which is expected to cost $150 million, is ongoing.

Molyneux's mining experience began with his stint as CEO of SouthGobe Energy Resources, a coal mining operation in Mongolia. The company was controlled by a firm founded by Friedland. Molyneux was fired from this position after the company wracked up millions of dollars in operating losses and he apparently alienated the Mongolian government.

A market observer summarized the situation, quote: "The SouthGobi thing was a mess, with restated financials for two years, an abortive takeout by a China company, Rio Tinto's giving

Mr. Molyneux his walking papers, and Ontario-groomed class-action lawsuits." That's from *The Calandra Report*.

Whether Azarga intends to actually mine uranium in the Black Hills remains to be seen. It is also possible that the company hopes to make a profit by getting mining permits, then selling the proposed mine site to someone else, or they might get permission to create deep disposal wells and start taking in waste from other mines.

In addition, Azarga/Powertech's own statements have faced scrutiny by the British Columbia Securities Commission. Canadian regulators consider Azarga's preliminary assessments "too speculative geologically." Azarga acknowledged certain, quote, "deficiencies" in its filings relating to the Dewey-Burdock project.

There should be no deficiencies where our water is concerned. Regardless of who owns uranium properties in the Black Hills, I oppose uranium mining in the area.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Lambert.

Helene Gaddie.

HELENE GADDIE: Good evening. 

I am coming from the Oglala Lakota Nation. My name is Helene Gaddie. My Lakota name is (Speaking in indigenous language). And I wanted to share my concerns about this uranium mine that is proposed.

There's some -- the greatest concerns that I have for this is, of course, the treaties first because they are the supreme law of the land, the 1868 and 1851 treaties, which we shouldn't even be standing here questioning why somebody wants to put a mine, why it should have gone this far.

Secondly, there is -- the entire area of the Black Hills is very, very important, and it's very -- it's a very sacred place. And in that area there's sacred sites, traditional Lakota burial sites as well as different parts of, you know, where you would find historical petroglyphs and different sacred sites like that.

And then the next part -- and I think that's the most part that we've been hearing, is this stratigraphy and the fault lines that are --

have been proven. We can't see below the surface, but from different researchers and just recently, we know that the stratigraphy is not even.

As you seen, the stratigraphic column that was displayed on the screen where it showed that everything is straight across, the hydrogeology, the geological stratigraphy is not like that. There are fault lines there that are active, and the Black Hills are tectonically active.

From recent other uranium mines nearby, there was a spill in -- back in, I believe, it's within the last ten years. If you go to the different sites and learn about the uranium spills, you'll learn that one of them spilled 9,000 gallons per minute for a year, and this was leaked to the surface of toxic water within the past decade. And so how is this uranium mine supposed to -- or this uranium company supposed to monitor that?

Also, the other fact that come -- the other parts that come to mind, this -- whenever you're talking about the geology, it says that it's -- you know, the Black Hills are part of the Late Cretaceous period, but also we also have the

late Eocene period in here, which has the active fault lines, the fractures, and the folds.

In the past at that site when they had the uranium mine when they talked about the air being contaminated and the water being contaminated, could it be caused from the 4,000 exploration drill holes that took place there? The 115 holes, the 20 monitoring wells, which were unplugged?

And we know that they are supposed to be -- whenever you do the test drilling, they're supposed to be filled in in a certain way, but these were not filled in that way.

When you're looking into the history of how they cleaned up the mines, they were not cleaned up because some -- when you go back into the research of the drillers' logs from the last hearings on this specific place and that site, they were filled with fence posts. So how do you fill drill holes with fence posts when they are supposed to be secured?

The other thing is, where is the baseline data? We're talking about three -- we're talking about different types of uranium. You have your natural uranium, the -238, which is

like 98 percent -- when you're exposing this to air -- the air, it's causing different chemicals to come into your -- you know, humans are being exposed to that.

Is it being tested? Is there any baseline data in that area that is downwind? We have a rain shadow effect coming off the Black Hills into the prairie and the Badlands area. How far is that?

We have a map up here that shows the little uranium area, but is the air quality taken into consideration?

There's -- which way does the wind blow? Where does the most contaminants come from, the analysis from that? There is no baseline data in Oglala Lakota County, Fall River County for air quality, and that should be a significant factor.

The other factor is when we go -- when these parts, there's a big reservoir, Angostura, which is already highly contaminated from the Crow Butte uranium mine, which goes into the other watersheds. The first-order, second-order streams, the artesian water flows through this where they want to take the water up from

whenever, you know, in the process of the uranium and bringing it back in, supposedly cleaning, putting the water -- clean water back in.

But this also flows into the Cheyenne River, White River, and the Hat Creek alluvium. And so those would expose the water, the trees, the humans, everybody to those contaminants. Is that being considered?

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Gaddie.

Rick Bell.

RICK BELL: Hi. My name is Rick Bell. I spoke earlier this afternoon, so you have all my CV, my resume. I'm going to be brief.

I talked earlier this afternoon in opposition to the Class III wells, and this evening I just wanted to say I'm also opposed to the Class V wells. It's my fervent hope that they will be denied as well, or at least modified extensively.

I'd like to submit for the record an article that was in yesterday's *Rapid City Journal* paper. I'll give it to you in a minute here.

It was entitled in my newspaper that I got at home, "Charges fly before the EPA hearing." And then when I went to the Website to print it out this morning, it says, "Claims, counterclaims fly before the uranium mine hearings," but I think it's the same article that I got in the paper. It's just I couldn't make a copy of it, a good copy of it.

What I wanted to point out with regard to this *Journal* article is there made reference to a video posted by Facebook by the Council for Responsible Mining in which the narrator says that if Powertech -- if the Powertech mine is permitted, the company will bring in waste from other mines. It also says that, according to the EPA, this area permit would not restrict Powertech from bringing in waste fluids from other mines.

We've already heard here this evening a lot of questions about what is really Powertech's intent. They have uranium prices that are 20 to $30 a pound, and they've already stated that if it's not at least in the 55, 65 range, they can't make this mine economically viable. So what is it they really have in mind?

My fear is that they want these -- I think it's already been posited here this evening, they want these Class V wells in order to become a waste disposal site. There are hundreds of mines within a few-hundred-mile radius, and I think it would be possible for them to be bringing in waste from other sites.

What I wanted to talk about this evening, it's unfortunate that Powertech people are not here, as they were earlier today, to confront them in some regard because the article that I referenced to the *Rapid City Journal*, it goes on to say that they spoke with Mark Hollenbeck, an Edgemont area rancher, and the project director for Powertech by phone.

And he denied the claim made by the Council for Responsible Mining. He said that is absolutely false in reference to bringing in -- their intention to bring in mining waste from other sites.

So if this statement was made by an official representative of the company, we should hold Powertech to their word. Therefore, if the EPA does decide to grant final five -- Class V well permits to Powertech, the Agency should insist

that no other company's waste fluids be allowed to be brought into this site for disposal.

In addition, if permitted, I would say that no more than two Class V wells should even be considered here. If more wells are needed in the future, let Powertech submit additional applications and undergo the review process in accordance with 40 CFR, et cetera, et cetera.

So I would just make reference to those articles that are in public papers. In case you guys don't have any, I'll give you a copy.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Bell.

Next if we can have Michael Milk.

AUDIENCE MEMBER: He just left. He thought you skipped him. He's going to speak tomorrow.

REGIONAL JUDICIAL OFFICER SUTIN: Okay. Thank you.

Laura Bidwell. Laural Bidwell, excuse me.

LAURAL BIDWELL: Yes. My name is Laural Bidwell. I'm a resident of Rapid City. I lived in Hot Springs for 11 years and used to walk my dogs in Edgemont.

And I don't know a lot about geology, but the one thing I do know is that the State of

South Dakota has never been particularly interested in protecting its natural resources.

Their bonds that they usually require in order for people to clean up sites should they contaminate them have been far less than the amount of money that it takes to clean them up.

Uranium mines in the past in the Edgemont area have claimed bankruptcy and left disaster areas behind them. I don't think that Azarga looks like a company that's inclined to be successful, so I see this happening once again.

I'm also concerned that the EPA right now does not particularly seem to have a lot of support from our current administration, so I'm not sure you're going to have the manpower to invest in monitoring the progress of these wells. So I'm concerned about that.

And my final comment is that I really have a question as to what benefit these wells have to South Dakota residents. We're putting our water at risk, and there's no benefit to the state. There's no particular benefit to the United States. So I just -- also want to stay informed as to the progress of these hearings.

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Bidwell.

Terri Hulm.

TERRI HULM: Good evening. I'm Terri Hulm. 

I'm a Cheyenne River Sioux Tribal member. We get our water from the Cheyenne River. It's already been contaminated. It's contaminated. We have arsenic. We have cancer clusters, and children swim there.

You guys -- most of what I wanted to talk about was covered. Azarga is a completely unethical company if you research them. Powertech is a subsidiary of Azarga. They are going to do the same thing every other uranium mine has done. They are going to abandon it once they've made it toxic and leave.

We all know the drill. We've been through it. We've lived through it, and we've lost loved ones due to death, due to cancer. I've worked in the nuclear industry. I understand what kind of radiation you're talking about, and you can't take a shower or wash your clothes with that kind of protective gear on. You're supposed -- you know, how do you protect yourself? How do you protect your children?

Your water will be ruined. It's going to communicate. We all know that. The water is going to mix. Then you're talking about having these pools to clean up contamination when radium has a half-life of 1,600 years. So, what, it just evaporates off, and we breathe it in? How does that work?

You know, this is all to make a company out of Hong Kong money at the expense of the citizens of the United States and the citizens of all of our tribes and the citizens of the state of South Dakota? Just to send money to Hong Kong.

They want to drill 17 boreholes out there so they can bring in more radioactive water and put them in the boreholes, and it will seep into the water source.

And you guys are going to monitor it, but how are you going to clean it up? In the fracking solution, two drops of benzene in fracking makes 30 gallons of water into a carcinogen.

So how -- how could this even be considered safe, viable, or even something that should be done? It's all in the name of making profit for

a company out of Hong Kong. You know, it's not going to benefit anyone here, anyone, anyone in this room, anyone who lives in this state, you know.

It might benefit the hospital industry with their rising cancer rates, but it's not going to benefit anything else. I don't understand why this is even being considered for permitting.

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Hulm.

Next can we have Bryce In the Woods.

BRYCE IN THE WOODS: Good evening.

You know, when Powertech was doing this years ago, they went belly-up. And then you have this Chinese company come in and trying to revive something that should have remained dead.

Just a couple questions: You said no questions, but can the -- can the -- can the EPA put your website on climate change back up and actions to address climate change involving water? And when will foreign companies be held accountable for restoring water, groundwater, and aquifers?

My big concern is the bleed production that

you're mentioning here. There's no control. It's a manmade disaster. You have corporation monitoring corporation; no oversight. And it seems like every time certain parties get into the White House, the EPA gets under attack.

Under previous, previous administration, I think the EPA was -- the director changed three times. So it's coming from Corporate America, a representative of Corporate America in the White House.

And for the people, it is a health concern that you heard. We're facing radiation fallout right now from Fukushima Daiichi, you know.

Environmental Protection Agency, you know how these aquifers move. And you mentioned the movement of one aquifer, the pressure, and the other one you was mentioning, not so much pressure. To me, you are open-invitation for contamination by these corporations to do whatever they want to pollute the water and say, Well, it was polluted. That was my take on your little presentation there.

My concern again would be the bleed production, and there's no oversight.

So I think that the best public interest

would be to look at the health of not only the people, but the health of everything, the water itself. It appears like we're being under attack, a constant attack.

And, you know, if you look at our people here and you look at the Black Hills, the Supreme Court ruling saying that, you know -- this rank and disarm dealings in history. And now the American people are starting to realize what we've already realized, you know, and what we realized and live with today, you know.

So it is a people issue. This bleed production, which is going to contaminate, no matter what EPA, you know, says, no matter what Powertech says, this bleed production is going to be out of control.

There's no way it can be controlled. No way. You can turn your pumps on and try to bring that back in, but you just can't tell, you know. You just -- you just don't know. That factor alone should make somebody's permit, like South Dakota permitting and NRCS, you know, they're actually kind of dropping the ball now, and it's a very big concern.

The Nuclear Regulatory Commission, they

should be dealing seriously, but now they look like they're passing that ball. That's going to hurt the people. And EPA is going to be hamstringing again, you know.

And all these things that are coming, like this abrupt climate change. Best scenario, I guess, would be on top. When the tsunami hit those reactors at Fukushima Daiichi and created that -- probably extinction-level event now, that everybody is either sleeping or -- what can we do? You know, so it's right along with anything that radiation does.

We're drinking alpha emitters where I'm from, the Cheyenne River Sioux Tribe, in the water. There was barium in it the last -- two years ago, and now the barium is gone and the alpha emitters are back. So it is going to be a major health issue 10, 20, 30 years.

But the bleed production alone should -- should -- you know, should deny the permitting of this insanity, I'll call it. In Lakota, (Speaking in indigenous language).

It's kind of, in English, like you're being fooled, a movement of deceit, something like that. You know, that is -- there's some kind of

deceit here and movement. When you're dealing with something like water, that's actually medicine, and then you're turning something to what we're drinking now into alpha emitters 100-some miles from here.

So the Cheyenne River Sioux Tribe stands opposed to this, and we'll be making some more comments before the 19th. But you got our initial resolution, and I'd like to thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. In the Woods.

Next if we can have Senator Kevin Killer.

SENATOR KEVIN KILLER: (Speaking in indigenous language.)

That's our traditional greeting in Lakota. I shake your hands with a warm and good heart, and I want to say, you know, thank you to hosting these hearings. You know, I come up here in opposition to the proposed mine.

Mainly, you know, from working on legislation at the state level and understanding that, you know, we did -- recently did a bill dealing with a project in Haakon -- a proposed project in Haakon County, and this basically had to deal with drilling down into the proposed --

proposed area.

And a lot of that research, you know, I actually, you know, seen what happened and seen how that kind of played out. It was -- it was alarming because, you know, at the end of the day, I think we saw, just based on the research alone, that there wasn't a lot of outlets for this waste, high-level waste.

So our legislature basically took the bill, and we approved the legislature's input in this process. Before it was just the governor, and now it's -- the legislature can be involved in that.

Specifically, you know, I just want to say that, you know, South Dakota is not a nuclear waste dump. And that's my biggest concern out of all of this, is that -- ensuring that, you know, we -- you know, our citizens are heard and our communities are heard, and especial our Native American communities.

And, you know, one of the things I really want to ask for is, you know, we need a cumulative impact analysis of the EPA/NRC uranium mining activities on the Pine Ridge Reservation, because a lot of the data that does

currently exist is either out of date or hasn't been thorough enough, especially when dealing with some of these projects.

And another thing is, you know, I think just this one proposed mine, the Powertech uranium mine near Edgemont would consume over two and a half billion gallons of water during its lifetime.

And that's really concerning, especially regarding with historical treaty claims, but also just, you know, the water use in South Dakota and how will that impact our agricultural and livestock communities.

And this is according to the own company's figures. So that's something I really want to stress.

Foreign companies are not going to benefit anybody. They are not going to benefit anybody in South Dakota. And most of them are from Canada, want to mine local uranium. Currently the largest market for uranium is in China and India, so none of that's really going to benefit any of us.

Uranium One, which is an in-situ leach uranium project in East Wyoming, is being bought

by ARMZ, a company that is controlled by the Russian government. So there's -- I think that there is -- there's going to be no benefit -- local benefit, and I think that's, you know, really something to consider, especially coming from, you know, my perspective as a state senator.

And I come into this -- you know, I served eight years in the legislature -- with this understanding, no local controls are being issued to anybody in this region, and understanding local input is something that's really needed for a lot of our communities.

So, I just want to the stress that, you know, I do stand in opposition to this. And, you know, I know that some members of our tribal community are going to be here tomorrow. But as a state senator, I just wanted to come and express my thoughts and feelings.

Thank you again for hosting this hearing, and I appreciate giving me the time to do this. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Senator.

Next if we can have Carey MacCarthy.

CAREY MACCARTHY: Hello, members of the panel and everybody in the audience. Thank you so much for giving us this opportunity to voice our hearts and our minds on this issue. It's very important.

First of all, I'd like to just say I'm here speaking on behalf of the Native people of this land. You want to drill for uranium in the Black Hills, which, for one, is not our land to drill on. It was stolen by a broken treaty, and it's not okay to just continue with greed and force people into making choices that they have no jurisdiction.

I just want to read a little bit about Chief Seattle's poem that he wrote to Washington when they wanted to take their land. "The President in Washington sends word that he wishes to buy our land. But how can you buy or sell the sky or the land? The idea is strange to us. If we do not own the freshness of the air and the sparkle of the water, how can you sell it then?

"Every part of this earth is sacred to my people. Every shining pine needle, every humming insect, all are holy in the memory and experience of my people."

And he goes on to say: "If we sell you our land, remember that the air is precious to us, that the air shares its spirit with all the life it supports. The wind that gave our grandfather his first breath also receives his last sigh. The wind also gives our children the spirit of life. So if we sell you our land, you must keep it apart and sacred as a place where man can go to taste the wind that is sweetened by the meadow flowers.

"This we know: The earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all. Man did not weave the web of life, he is merely a strand of it. Whatever he does to the web, he does to himself."

So with that, we cannot deny climate change, like many of the people who are in government are choosing to do. We cannot deny the effects that this project will have long-term for not only ourselves, but also for our children, our grandchildren.

And it is of the Native belief that we need to keep in mind the lives of our grandchildren when we make decisions today, that seventh

generation principle, and we can't forget that.

So keep these words in mind and the prayers of the people and the life of this earth when you are making your decision. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you. Susan Henderson.

SUSAN HENDERSON: Good evening. My name is Susan Henderson. You may know me as a cattle rancher for some 23, 24 years. I run an 8,000-acre cattle ranch that has been in my family since 1902, that is just south of the Dewey-Burdock area. My hometown was Edgemont, South Dakota, where I went to high school and where I still have many friends and classmates.

I have a long history of working hard. I went to college. My father sent me out to get a job. I started working in advertising. I worked for some 30 years in places like New York, Chicago, Houston, Atlanta for Fortune 500 companies and some of the biggest advertising deals that we ever have done in that time frame.

After I quit that, I came out to run my family ranch, and I became the chairman of the Restoration Advisory Board for the cleanup of the Black Hills Army Depot from 1991 to 2001. I

served as the chairman of that for that ten years, and I learned more about chemical warfare agents and water than I ever thought I ever wanted to know.

I also served for ten years as the chairman of the Igloo Provo Water Project District. In the process of all this, I have come to know that Hippocrates, the noted Greek doctor that died in 370 B.C. had a very important thing that has -- that he gave to the world that has transcended through the centuries and all new doctors take this oath, and it is basically this: "First, do no harm."

Well, I have news for you. This project will do immeasurable harm. It will harm agriculture. It will harm wildlife. It will harm tourism. It will probably destroy the water table in our area. I would tell you that most of the ranches in the Custer-Fall River County area, which there are some 2500 wells, depend on underground water for their livestock and for their drinking water. My ranch is no exception.

Without my natural spring and my deep well, I would not be able to run my cattle most of the

time. Because this is an arid area, it is near desert part of the time. We never know what it's going to be like, and many years we would run out of water.

I can remember going around my ranch with my father. He had a -- some hip boots in his pickup, and he would wade out into our dams with a little vial of -- a collection vial to collect water, and we would drag it to Rapid City in a mad fire to see if the water had gone toxic from just the normal runoff. And if it had, we'd move the cattle in the next few hours. He had a deal with the lab here in Rapid City that turned these reports around.

So water is a very, very important thing, not only agriculturally, but to all the other people that have farms and homes in these two counties.

I have been told by noted hydrologists from the School of Mines, particularly one Dr. Perry Rahn, that taking some 9,000 gallons a minute of water out of our watersheds would probably dry up a significant portion of the 2500 wells and it might make a number of them extremely toxic.

We have a plan here, which is going to take

4,000 wells, and use it, supposedly, for uranium mining. But I want to discuss this business of uranium mining for a minute so that you understand where this is all coming from.

This company began as a hedge fund in Vancouver, Canada, with ten employees. They went to Colorado. They drilled some test wells down there. They polluted some water. They got sued. The lawsuits ended up in front of the supreme court of Colorado. The governor got into it, as well as the legislature. They basically got thrown out of Colorado for having made a mess.

And there is a wonderful website for this called PowertechExposed.com, which you can look at for the history of this. They then came to little South Dakota, which had rudimentary rules about handling uranium mining and it had very rudimentary rules about watching after this.

And then they ran into a local guy named Mark Hollenbeck, whose family had ranched in the Dewey-Burdock area for some time. And he had been a state legislator for two years, and then he turned into a lobbyist, and then he somehow met the Powertech people, and then they began to

attack South Dakota.

First thing they did was they began to sell stock out of this hedge fund to everybody and anybody that would buy it. Before it was over, a significant portion of our state legislature had bought stock in it, so had every person of any wealth in Rapid City and Sioux Falls and Belgium and places like this.

Pretty soon, Powertech had sold a whopping 420 million shares of stock. It had run close to $70 million through it, and that was all from stock sales. And they had spent the money on a few lawyers, a few hydrologists, and themselves. Themselves got the biggest part of this.

To get you in perspective, 420 million shares is a gigantic amount of shares for a little hedge fund company that has never booked a single dollar of normal money from any operation that they might do.

Somewhere along the line, about eight months ago --

REGIONAL JUDICIAL OFFICER SUTIN: Ms. Henderson, I'm sorry to interrupt, but we've been giving people five minutes to speak. So I need to have you wrap up for now. If there's

time after everyone who's wanted to speak has had that opportunity, I'm happy to let you come up and speak some more. I want to make sure everyone has the opportunity to speak.

SUSAN HENDERSON: I'm not sure I'm happy with this, but at any rate, I will respect what you have to say.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

SUSAN HENDERSON: They sold some stock to Synatom, which is a unit of GDF Suez. They put -- Synatom put two guys on their board for about six months, and then they abruptly got off. They walked away from the $7 million that they had given to Powertech. And you have to look at what is Synatom doing.

Well, Synatom is the largest purveyor of uranium worldwide. They sell uranium to countries that want to buy it, to our plants, et cetera, et cetera. GDF Suez is a huge, global conglomerate that is involved in water projects worldwide, and they bottle and buy up water.

So one of the things that's going to be interesting in this permit application is what is the real fate of the water.

Now, this company is broke. It is supposed

to, according to the EPA -- or the NRC, it is supposed to fill in 7,650 boreholes out there. If you spent $50,000 a piece on that, you'd be talking about $382 million. They don't have this kind of money. They don't have any money at all.

This is a company that has manipulated their annual reports and their quarterly reports to drive the stock up and down. That's what they're really doing. This thing is a stock scam.

So because the EPA allows this permit to be sold, this thing will be sold the next morning. After they get the permits and after they get the giant water permit, the largest one that South Dakota will have ever issued, then they will be able to sell this. 30 percent of the leases in the Dewey-Burdock are owned by a Russian company called Uranium One.

Now, I hardly think --

REGIONAL JUDICIAL OFFICER SUTIN: Ms. Henderson, I really do need to ask you to --

SUSAN HENDERSON: I know you do. You don't want to hear this, but --

REGIONAL JUDICIAL OFFICER SUTIN: I do. I

do want to hear it. But I want to be fair to everyone who's here, and I've asked other people to stop after five minutes.

Once everyone has had the opportunity to speak, I am more than happy to let you come and finish your testimony.

SUSAN HENDERSON: Well, that's fine. But I'm telling you -- the last thing I have to say here is that this is not going to be uranium mining. This is going to be, sell the permit, and then we'll see what we're going to do with it.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

SUSAN HENDERSON: Good afternoon.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you. Thanks, Ms. Henderson.

SUSAN HENDERSON: Well, I can't get it back in there, so I'll give it to you.

And for the record, five minutes is a ridiculous amount of time.

REGIONAL JUDICIAL OFFICER SUTIN: Next, if we can have James Huff.

JAMES HUFF: Thank you for your patience --

REGIONAL JUDICIAL OFFICER SUTIN: Of course.

JAMES HUFF: -- while I get situated here.

I'm known by two names, James Huff and Navy Captain Jim Huff. I'm a retired Naval Intelligence Officer, and I'm coming at this issue from a different direction.

First of all, I want you to know I'm wholly opposed to granting these permits. A little bit about my background: I had two parallel careers. One was with the VA and one was with Naval Intelligence. I have a graduate degree in biochemical pharmacology, spent 11 years in research at the VA, and went to medical school in Houston.

Now, during the Vietnam War, I received a direct commission in Naval Intelligence. The Navy was looking for individuals who were basic scientists, individuals who had exotic language skills, mathematicians, and computer types. But they had to have prior military service. My prior military service was in the Marine Corps.

With all that said, I'll explain why I'm interested in this issue. It's not just the drilling of these wells for uranium, but it's what this drilling will do to the geography, the geology surrounding the Black Hills Army Depot.

I was involved in studying binary nerve

gasses. My last ACDUTRA, my last active duty was for this war, the Gulf War. It was there that we studied the gasses that were used by Saddam Hussein against the Kurds. I have an in-depth knowledge of both tertiary and binary gasses.

The gasses that are stored at the depot -- and there's documentation, and I have gone through the archival report here. The archival report indicates that the gasses that were brought in, primarily phosgene and a variety of nerve gasses, are still there. They were buried there. They were buried there in containers that are now rusting out.

To allow anyone to come in and drill in proximity to the Black Hills Army Depot would be outrageous because these gasses will plume into the soil, into the aquifers. And the drilling itself is one thing, but if there's any siesmic activity there, the siesmic activity itself would have a tendency to jar the rock formations so that the aquifers would be negatively affected.

Now, my personal interest began in 1978, '79, and '80. I was the associate director of

the VA hospital at Fort Meade, but I was also a Naval Intelligence Officer who commuted out of here about every three weeks to complete whatever missions were required. I would go back to Naval Air Station Glenview.

But I was fascinated by what was going on at the depot because one of my employees, our chief of police, would go there to hunt souvenirs. So I made it a point to study these reports.

I left. And in 1994, I retired from the VA, retired from Naval Intelligence, and came back here. And I see the issue is still going on. People are still trying to exploit the area around the depot, and I am seriously concerned about it.

And I will relinquish the floor with 20 seconds left. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Huff.

Those are all of the registered speakers we have so far. Is there anyone else who has not registered at this time who would like to make a statement?

Is there anyone who has made a statement that would like to get up and give further

testimony?

Ms. Henderson, please come up.

SUSAN HENDERSON: Thank you.

We have one chance at this. If we permit this and we allow this company to sell the permit or keep the permit or proceed with uranium mining or not proceed with uranium mining or whatever it decides to do to make money to feed its voracious appetites, we do not get to do this over.

Radioactivity is so very lethal, so very permanent, and so very hard to work with that that we will forever have to deal with what comes because we have allowed this to happen. We cannot imagine the problems that will ensue.

The mining that was done there in the '50s and '60s that was documented by the *Rapid City Journal* described a uranium processing plant that was at the edge of Edgemont. And when it was over, 3 million tons of white radioactive sand that had come out of that plant was hauled to the south of Edgemont and buried, 3 million tons. And that was the processed sludge from the thing.

There are 200 mines out there, some four of

them have -- are over a mile across, full of at least 90 feet of highly radioactive water. This is an accident waiting to happen.

It's draining into Beaver Creek and Pass Creek, which drains into the Cheyenne, which drains into Angostura Dam, which drains into the Missouri River.

And now we have had the NRC say, Well, if you're going to mine out there, you better fill in the 7,650 boreholes that were left out there. But this company is making no effort to do that, nor do they have the money to do that. It would cost millions of dollars to do that before they ever could begin mining.

There was a testimony in Hot Springs last week about the fact that the Tennessee Valley Authority had some sort of a report that had been bought by or given to Powertech that indicated that there were -- after ten years of the TVA studying the site, that there was not recoverable uranium there to be mined.

Well, the import of this is, if they knew about this at the beginning, then they defrauded every single stockholder because they sold this stock based on a uranium mining project. And

they may or may not have -- but I suspect they did have -- knowledge of aforesaid, that there was no recoverable uranium there to mine.

So once we give them this permit, what are they going to do about this problem? They don't want to spend $300-plus million filling in the boreholes. They want to sell this property.

What does that property have that would be valuable? Well, it's going to have this huge water permit, and remember that this company has been bought by an outfit called Azarga out of Hong Kong and has Chinese interests in it. The Chinese are rolling all over the world looking for potable water because they have ruined the water in their country.

And they did business with GDF Suez for a while, which was the largest water development company in the world outside of Nestle. And then they might want to sell the permit to somebody that could dump some kind of radioactive or otherwise toxic materials into those wells.

And there are some local people in our area who have already tried to have a waste dump for fracking waste.

And of course, to get this into perspective for you, Wyoming and North Dakota have now decided -- and Montana have decided that they don't want the highly toxic fracking waste dumped in their states, so they are looking for a place to put it, and I suspect that South Dakota has been figured out as a place.

So once we give these guys the permit, they will have the ability to do something with this permit other than do uranium.

I think the previous speaker talked about the Black Hills Army Depot. I won't belabor that except to say that that is the most toxic waste site in the world. It was billed as the largest chemical warfare agent dumping ground in the entire world.

For the ten years that we studied it, we had a $5 billion budget, which we never spent because we determined that we couldn't repair the damage.

We couldn't decompose the stuff stored out there, and it was going to percolate down through the shale and sit there. And the bottom line is, if we start disturbing the underground structures -- and remember that the Wind Cave

structure goes all the way from the Dewey-Burdock area down into the depot, so there are vast cave structures that are available to move this material around -- I am pretty concerned, very concerned that we will cause an environmental, ecological nightmare with the undecomposable chemical warfare agents.

So I don't think that's a good idea. I don't think mining is a good idea. I don't think 4,000 wells is reasonable.

I know that using that much water will destroy agriculture. And you have to realize that these aquifers are close together down there. The Minnelusa, the Inyan Kara, the Madison are all relatively close together in that area. It will be just a short matter of time before we have polluted all of those.

If you look at the water that comes, supposedly, out of the Madison as a flowing spring in Hot Springs, at about 70 degrees, you'll find that that also has contaminants from the Inyan Kara and the Minnelusa. If you look at the Madison in Edgemont, it's 4,000 feet deep, the water is boiling hot, 210 degrees -- boiling is 212 -- and it isn't pure either. It

is exhibiting radioactivity and arsenic and other contaminants.

If you look at the Madison in Provo, another 8 miles south, right near the depot there, you'll see a 4,200-foot well that has, you know, some level of radiation, some level of arsenic and it is boiling hot.

The boiling hot tells you that this is a seismically active area. It's picking up the heat from the earth's crust, and it's coming up there. One of the things that we may see when we do all this is we may see earthquake activity.

You know, I have experienced minor earthquakes at the ranch all my life, you know, things where the furniture moves a little bit, the pictures get cattywampus, this kind of thing.

You can look out of the window of the ranch living room, and you can see an ancient volcano right straight out there, less than 5 miles away. This is a seismically active area to start with. That area just to the west has something called the Dewey Fault.

What we're liable to get, if we play this

game, is siesmic activity, and we're liable to get earthquakes, and we might not be able to contain what we already have going in Igloo, the Black Hills Army Depot, because we will have greatly disturbed it.

So this company does not have the money to mine. It has not acted properly toward its stockholders. It never registered with the SEC, or with the Securities and Exchange Commission, of the State of South Dakota until, you know, just recently. For the longest time, it didn't even have audited financial reports.

The financial reports you got to read were things that they basically made up, and they were doing this so they could keep selling the stock.

Their whole idea was to sell the stock and make money on the stock. That's why they got the 420 million shares of stock, that's why they got the some $70 million in, and they basically spent it, so this company has never operated as a proper uranium mining company.

And I would also tell you that some of the principals of that company do not have good track records either. So the bottom line is

that this will not be a uranium mining operation. This will be a sale to somebody who's going to do something we probably aren't going to like.

The Russian involvement comes from a company called Energy Metals Corporation, which had hundreds of thousands of leases around the American West for uranium mining and for oil and gas exploration. And it was bought by Uranium One, which is Vladimir Putin's wholly owned Russian uranium mining company.

You can read about this on the front page of *The New York Times* on April 23rd, 2015. But the bottom line is that Mrs. Clinton, when she was Secretary of State, allowed him to buy that, and in the process of this, they got hundreds of thousands of acres of mineral leases around the West that they now own.

And they are going to mine uranium, and they are going to process it, and then they are going to ship it out of the country. And when it gets out of the country, it may end up in places like North Korea, Iran, Pakistan, you know, some places that we can't control very well and that we're now genuinely afraid of. So this whole

thing has national security issues.

I really question whether a deputy sheriff in Fall River County -- a sheriff in Fall River County and four deputies can adequately police this. For example, if there were a call at the proposed Dewey-Burdock processing site, which they want to build at the west end of their 10,500-acre plot there, and you called in 911 and you wanted help, the sheriff, who is based in Hot Springs, would take close to an hour and a quarter to get there. That's if he had a deputy that was available, da-da, da-da, da-da.

I mean, there is not adequate fire protection for this. There is nothing that makes this thing work out well.

Now, the business of South Dakota is agriculture, the second business of South Dakota is tourism, the third business of South Dakota is hunting, and the rest of it is a small piece of the action. There is no real reason why we should take this risk with our environment and our water for a little uranium mining that's going to benefit a few families, Mr. Hollenbeck, and the people in the Powertech/Azarga Company.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,

Ms. Henderson.

SUSAN HENDERSON: Thank you for letting me come back.

REGIONAL JUDICIAL OFFICER SUTIN: Of course.

Is there anyone else who would like to get up and speak?

If you could fill out a card so we have your name.

(Pause in proceeding.)

REGIONAL JUDICIAL OFFICER SUTIN: Karin Eagle.

KARIN EAGLE: Good evening. My name is Karin Eagle, and I'm member of the Oglala Sioux Tribe. My home is in Pine Ridge. And I'm here for -- here in Rapid City for a different reason, but I had to come here.

And I wasn't going to speak, but I got a message from a family member who told me that when we don't speak, then we risk -- run the risk of becoming part of the problem.

And so what I want to speak about right now -- oh, and just for the record, if you're not very tall, you can't even see what the timer says, so maybe a hands up or something.

REGIONAL JUDICIAL OFFICER SUTIN: We'll let

you know.

KARIN EAGLE: We -- I can only speak for myself and how I was raised. But in our family, song was everything. And all our songs are sacred to us. Even our thanksgiving songs and our honoring songs, and even just our social songs, they have a special meaning for us.

And I've learned by becoming somewhat involved in our tribal government and reaching further out into the national government, that there's a certain language that we have to speak to each other, and so I've taught myself how to speak your language.

And so rather than giving you one of our songs, I wanted to remind you of one of your songs. And the words are written by Katharine Lee Bates. And I won't sing it.

O beautiful for spacious skies, for amber waves of grain, for purple mountain majesties, above the fruited plain! America! America! God shed His grace on thee and crown thy good with brotherhood from sea to shining sea!

O beautiful for pilgrim feet, whose stern, impassioned stress a thoroughfare of freedom beat across the wilderness! America! America!

God mend thine every flaw, confirm thy soul in self-control, thy liberty in law.

O beautiful for heroes proved in liberating strife, who more than self their country loved and mercy more than life! America! America! May God thy gold refine, til all success be nobleness, and every gain divine!

And as you know, it goes on for many, many stanzas.

But the reason why I chose that song to remind you of is because there's something here in America that's more important than money, because money is very, very temporary. We all know that. It's more important than politics, because politics change every two, four, six eight years. It changes with every generation.

But the one thing that's so important that every school that I went to taught me in civics class was our citizenry. And tonight I was fortunate enough to be here to catch two amazing speakers. One person who spoke to my heart, because I'm all -- I love facts. I love knowledge. I love the truth. And so that empowered me to come up and speak.

And we also saw -- heard from a gentleman

who literally risked life and limb to protect all of us. And so I think that what this song, you know -- and it's a bit archaic language, but the real meaning comes through.

And I think that if we're going to seek nobleness, if we're going to seek liberty and we're going to seek law and divinity, then I think we need to start listening to the people -- not corporations, not CEOs or CFOs.

We need to start listening to every single person who runs a ranch, every single person who's raising children or grandchildren, every single person who has an emotional tie to the land.

Because if we take that away from them, then what are we left with? We are left with people who literally lose their spirit and their soul when you take that away, when you take something so precious as their connection to the land.

We see so many things desecrated across this country because people have lost that connection. And then you see our tribes coming forward who have maintained that connection and hang onto it and are standing in a state that's pretty divisive at times along racial lines.

You see people coming from different races, ethnicities, classes, genders, age groups. We're all standing together, and that's because we're coming together as people.

And it's really sad to me to explain to my kids why we have to fight our own government just to make sure that they -- when they're grown up that they have clean water and that they have sacred land that is un- -- beyond undesecrated. We need to start listening to each other.

And so in conclusion, what I want to do is I'm going to let you know that you and all those people who are going to be making this decision, I'm going to pray for you. And I'm going to pray that your eyes are opened and your ears are opened and that your heart is open enough to receive this message that's coming from people's hearts, people's very spirit crying out that this is wrong.

It's not going to do anybody any good except for a very few people, and this country deserves to live by that song. This country deserves to have liberty, life, health, happiness, even if it's just the pursuit of it. We still -- we all

deserve that, and so I'm going to hold you guys all in my prayers. And hopefully that's going to -- I know it's enough. I just hope that you're receptive to it. Thank you very much.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Eagle.

Christin Sjomeling. Sorry if I butchered that.

CHRISTIN SJOMELING: Thank you, everyone. Thank you for doing this, and I want to thank all the speakers. I just got here about an hour ago, and I hope I don't cry here, but -- you did say my name pretty close. Sjomeling is how you say it.

No, I guess, in one word is what we beg that this doesn't happen. I talked to my dad this morning. He had -- he came with the national security side of it to me. I said, Dad, I don't know. It's kind of like Ms. Henderson said, we get one chance.

The radioactivity that could possibly be released, you know. Say it's an all clean mine and there's no accident, in an ideal world, maybe. But the fact that there's a chance, that's never going to get cleaned up.

I love this state. I love the people in this state. And just like the speaker prior to me, when this is one place where we're all coming together and saying, No, thank you. So I don't really have any more to say. Just thanks for listening, and you'll be in my prayers, too.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Is there anyone else would who would like to get up and speak?

You'll have to remind us of your name.

MARVIN KAMMERER: It's Marvin Kammerer.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

MARVIN KAMMERER: From Meade County, South Dakota. Five minutes isn't enough, as the lady said, as you told me before.

You know, I don't like to get up here at these hearings and get angry, but you're messing with a gift of life. You're messing with the lives of children, generations not yet born, and those are the ones we have to consider. Seven generations hence. We listen to our Native American brothers. We should know that by now.

But we seem to be damn slow learners. South Dakota has been considered probably the second or third most corrupt state in the

nation. For two bits, they'd sell their mother for another buck. Years ago, before they ever come up with the Environmental Protection Agency, I remember when a river burned in Detroit --

AUDIENCE MEMBER: Cleveland.

MARVIN KAMMERER: Yup, Cleveland.

I remember another incident where Love Canal, they -- horrible things happened to people who lived there. And the government decided we needed to do something to protect the people. To protect the people, not to be speakeasies for the corporate powers. And that's what I think the Environmental Protection Agency is becoming, unfortunately.

But it takes backbone. It takes principle. It takes even threats. If you stand up to them, I'm sure all of you here representing the government have got a family, kids, maybe grandkids. I've got seven great-grandkids, and they are pretty damn precious to me. Five of our kids -- of our seven kids are still on ranches. We have to survive, and the most precious thing this year is water and grass.

I remember old Paul Harvey years ago --

thank God he's passed on -- he used to come up and bless the nuclear power industry every day. Cheapest, cleanest power there ever was. But he didn't tell us the rest of the story.

And that was, when we developed nuclear power, after we tore the hell out of part of Japan with the atomic bombs. We decided we needed power -- nuclear power for peace. Hell, they were even talking about blowing up mountains to get at whatever they needed under there.

So the United States government decided to give all the goodies and the money and the power and the profits to the nuclear power industry.

But the waste and the hell that it's caused in getting this power was to be borne by the government. We take power. We take waste from around the world. We're still taking waste. We don't know what the hell to do with it. We come up with all kinds of things. Carlsbad, New Mexico, I've been there. Out in Nevada, I've been there.

These people who've got the companies in their backyard want that waste the hell out of there. And maybe this new concept of extra

wells, we can't trust corporations. I'd like to trust my government, but I can't because they've let the companies get their wish far too often.

Mussolini described fascism, and I remember World War II well. He described fascism as when your government has been bought and paid for by the corporate powers. That's something we better think about if we want to keep this republic healthy and responsible.

And we should think of my Native brothers and sisters, what they have given to this country. There's no measure of what has been given by them, taken from them for the benefit of this country.

We owe them a hell of a lot, and maybe now we better start listening to their hearts. They tell some stories of history, things we should be paying attention to. We're not so wise. I don't care how well educationed you are -- educated you are. I rode horses to school for eight years, then I went four years to a Catholic school in town here. As far as I got with being smart.

But it's been a fight ever since to survive, against government policies, to stop making more

war, uranium, we're making weapons that we're using in Iraq. We used them, depleted uranium. What the hell's the matter with us? We've screwed up the life for millions of people.

They can't leave, and we cozily sit at home, watching our TV, sipping a tall drink or a short one. When I get home, I'm going to have one, I'll guarantee you, after this afternoon.

But I hope you listen, and I hope, I pray that you get some real backbone. This state is just coming out of the Dark Ages. We have to, we have to get better at what we do and respect the people, not to put government power in corporations. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Kammerer.

It is 8:00. We are going to end tonight's hearing. Thank you all for coming. We will be back here again tomorrow with information and a question-and-answer session from 1:00 to 2:00, and the hearing will start at 2:00 again.

Tomorrow we'll be here from 2:00 to 8:00 with a break from 5:00 to 6:00.

So please come to listen, or if you want to testify, if you haven't, we would very much like

to hear from you. So have a good night, everyone. The hearing is now closed.

(Proceeding was concluded at 8:00 p.m.)

C E R T I F I C A T E

STATE OF SOUTH DAKOTA }
} SS:
COUNTY OF PENNINGTON }

I, Jacqueline K. Perli, Registered Professional Reporter, do hereby certify that said proceedings were taken by me stenographically and thereafter reduced to typewriting under my supervision; that the foregoing is a true and accurate record of the proceeding to the best of my understanding and ability.

I further certify that I am neither counsel for, related to, nor an employee of any of the parties to this case and have no interest, financial or otherwise, in its outcome.

Dated this 24th day of May, 2017.

/s/ Jacqueline K. Perli

Registered Professional Reporter
Black Hills Reporting
1601 Mt. Rushmore Rd., Ste. 3280
Rapid City, SD 57701
605.721.2600
Notary Public
My commission expires: May 9, 2019